### DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

**50 CFR Part 17** 

[Docket No. FWS-R6-ES-2013-0082; 4500030113]

RIN 1018-AZ61

Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for Graham's Beardtongue (*Penstemon grahamii*) and White River Beardtongue (*Penstemon scariosus* var. *albifluvis*)

**AGENCY:** Fish and Wildlife Service, Interior.

**ACTION:** Proposed rule.

**SUMMARY:** We, the U.S. Fish and Wildlife Service, propose to designate critical habitat for Graham's beardtongue (*Penstemon grahamii*) and White River beardtongue (*Penstemon scariosus* var. *albifluvis*) under the Endangered Species Act of 1973, as amended (Act). We are proposing approximately 27,502 hectares (67,959 acres) for

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designation as critical habitat for Graham's beardtongue in Duchesne and Uintah Counties in Utah and Rio Blanco County in Colorado. We are proposing approximately 6,036 hectares (14,914 acres) for designation as critical habitat for White River beardtongue in Duchesne and Uintah Counties in Utah and Rio Blanco County in Colorado. If we finalize this rule as proposed, it will extend the Act's protections to these species' critical habitats.

DATES: We will accept comments received or postmarked on or before [INSERT]

DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

Comments submitted electronically using the Federal eRulemaking Portal (see

ADDRESSES section, below) must be received by 11:59 p.m. Eastern Time on the closing date. We must receive requests for public hearings, in writing, at the address shown in FOR FURTHER INFORMATION CONTACT by [INSERT DATE 45]

DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may submit comments by one of the following methods:

- (1) *Electronically*: Go to the Federal eRulemaking Portal: http://www.regulations.gov. Search for Docket No. FWS–R6–ES–2013–0082, which is the docket number for this rulemaking. Then, in the Search panel on the left side of the screen, under the Document Type heading, click on the Proposed Rules link to locate this document. You may submit a comment by clicking on "Comment Now!"
- (2) *By hard copy*: Submit by U.S. mail or hand-delivery to: Public Comments Processing, Attn: FWS–R6–ES–2013–0082; Division of Policy and Directives

Management; U.S. Fish and Wildlife Service; 4401 N. Fairfax Drive, MS 2042–PDM; Arlington, VA 22203.

We request that you send comments **only** by the methods described above. We will post all comments on *http://www.regulations.gov*. This generally means that we will post any personal information you provide us (see the **Information Requested** section below for more information).

The coordinates or plot points or both from which the maps are generated are included in the administrative record for this critical habitat designation and are available at <a href="http://www.fws.gov/utahfieldoffice">http://www.fws.gov/utahfieldoffice</a> under Latest News, <a href="http://www.regulations.gov">http://www.regulations.gov</a> at Docket No. FWS-R6-ES-2013-0082, and at the Utah Ecological Services Field Office (see **FOR FURTHER INFORMATION CONTACT**). Any additional tools or supporting information that we may develop for this critical habitat designation will also be available at the Fish and Wildlife Service website and Field Office set out above, and may also be included in the preamble and/or at <a href="http://www.regulations.gov">http://www.regulations.gov</a>.

**FOR FURTHER INFORMATION CONTACT:** Larry Crist, Field Supervisor, U.S. Fish and Wildlife Service, Utah Ecological Services Field Office, 2369 West Orton Circle, Suite 50, West Valley City, UT 84119; by telephone at 801-975-3330; or by facsimile at 801-975-3331. If you use a telecommunications device for the deaf (TDD), call the Federal Information Relay Service (FIRS) at 800-877-8339.

#### SUPPLEMENTARY INFORMATION:

## **Executive Summary**

Why we need to publish a rule. This is a proposed rule to designate critical habitat for two plant taxa, Graham's beardtongue (*Penstemon grahamii*) and White River beardtongue (*P. scariosus* var. *albifluvis*), which are proposed as threatened species under the Endangered Species Act (Act). A proposed rule to list Graham's beardtongue and White River beardtongue as threatened species is published elsewhere in today's **Federal Register**. Under the Act, any species that is determined to be an endangered or threatened species requires critical habitat to be designated, to the maximum extent prudent and determinable. Designations and revisions of critical habitat can only be completed by issuing a rule.

The basis for our action. Under the Endangered Species Act, any species that is determined to be an endangered or threatened species shall, to the maximum extent prudent and determinable, have habitat designated that is considered to be critical habitat.

Section 4(b)(2) of the Act states that the Secretary shall designate and make revisions to critical habitat on the basis of the best available scientific data after taking into consideration the economic impact, national security impact, and any other relevant impact of specifying any particular area as critical habitat. The Secretary may exclude an area from critical habitat if she determines that the benefits of such exclusion outweigh

the benefits of specifying such area as part of the critical habitat, unless she determines, based on the best scientific data available, that the failure to designate such area as critical habitat will result in the extinction of the species.

We are preparing an economic analysis of the proposed designations of critical habitat. In order to consider economic impacts, we are preparing an analysis of the economic impacts of the proposed critical habitat designations and related factors. We will announce the availability of the draft economic analysis as soon as it is completed, at which time we will seek additional public review and comment.

We will seek peer review. We are seeking comments from independent specialists to ensure that our critical habitat proposal is based on scientifically sound data and analyses. We have invited these peer reviewers to comment on our specific assumptions and conclusions in this critical habitat proposal. Because we will consider all comments and information we receive during the comment period, our final rule may differ from this proposal.

# **Information Requested**

We intend that any final action resulting from this proposed rule will be based on the best scientific data available and be as accurate and as effective as possible.

Therefore, we request comments or information from other concerned government agencies, the scientific community, industry, or any other interested party concerning this

proposed rule. We particularly seek comments regarding:

- (1) The reasons why we should or should not designate habitat as "critical habitat" under section 4 of the Act (16 U.S.C. 1531 *et seq.*) including whether there are threats to the species from human activity, the degree of which can be expected to increase due to the designation, and whether that increase in threat outweighs the benefit of designation such that the designation of critical habitat may not be prudent.
  - (2) Specific information on:
- (a) The amount and distribution of Graham's beardtongue and White River beardtongue occupied and suitable habitat;
- (b) Areas that were occupied at the time of listing (or are currently occupied) and that contain features essential to the conservation of the species that should be included in the designation and why;
- (c) What areas not occupied at the time of listing are essential for the conservation of the species and why;
- (d) What may constitute "physical or biological features essential to the conservation of the species," within the geographical range currently occupied by the species;
- (e) Where the "physical or biological features essential to the conservation of the species," features are currently found;
- (f) Information indicating how these species respond to natural and anthropogenic disturbances; and

- (g) Special management considerations or protection that may be needed in critical habitat areas we are proposing, including managing for the potential effects of climate change.
- (3) Land use designations and current or planned activities in the subject areas and their possible impacts on proposed critical habitat.
- (4) Information on the projected and reasonably likely impacts of climate change on Graham's and White River beardtongues and proposed critical habitat.
- (5) Any probable economic, national security, or other relevant impacts of designating any area that may be included in the final designation; in particular, we seek information on any impacts on small entities or families, and the benefits of including or excluding areas that exhibit these impacts.
- (6) Whether any specific areas we are proposing for critical habitat designation should be considered for exclusion under section 4(b)(2) of the Act, and whether the benefits of potentially excluding any specific area outweigh the benefits of including that area under section 4(b)(2) of the Act.
- (7) Whether we could improve or modify our approach to designating critical habitat in any way to provide for greater public participation and understanding, or to better accommodate public concerns and comments.

(8) The likelihood of adverse social reactions to the designation of critical habitat and how the consequences of such reactions, if likely to occur, would relate to the conservation and regulatory benefits of the proposed critical habitat designation.

Please include sufficient information with your submission (such as scientific journal articles or other publications) to allow us to verify any scientific or commercial information you include.

Please note that submissions merely stating support for or opposition to the action under consideration without providing supporting information, although noted, will not be considered in making a determination, as section 4(b)(2) of the Act directs that critical habitat designations be made based on the best scientific data available and after consideration of economic and other relevant impacts.

You may submit your comments and materials concerning this proposed rule by one of the methods listed in the **ADDRESSES** section. We request that you send comments only by the methods described in the **ADDRESSES** section.

We will post your entire comment—including your personal identifying information—on *http://www.regulations.gov*. You may request at the top of your document that we withhold personal information such as your street address, phone number, or e-mail address from public review; however, we cannot guarantee that we

will be able to do so.

Comments and materials we receive, as well as supporting documentation we used in preparing this proposed rule, will be available for public inspection on <a href="http://www.regulations.gov">http://www.regulations.gov</a>, or by appointment, during normal business hours, at the U.S. Fish and Wildlife Service, Utah Ecological Services Field Office (see **FOR FURTHER INFORMATION CONTACT**).

#### **Previous Federal Actions**

Elsewhere in today's **Federal Register**, we propose to list Graham's beardtongue and White River beardtongue as threatened species under the Act. Please see this proposed listing rule for a complete history of previous Federal actions for these two plants.

## **Background**

We intend to discuss only those topics directly relevant to the designation of critical habitat in this proposed rule. For more information on Graham's beardtongue and White River beardtongue, refer to the proposed rule to list these species, also published in today's **Federal Register**.

Critical habitat is defined in section 3 of the Act as:

- (1) The specific areas within the geographical area occupied by the species, at the time it is listed in accordance with the Act, on which are found those physical or biological features:
  - (a) Essential to the conservation of the species, and
  - (b) Which may require special management considerations or protection; and
- (2) Specific areas outside the geographical area occupied by the species at the time it is listed, upon a determination that such areas are essential for the conservation of the species.

Conservation, as defined under section 3 of the Act, means to use and the use of all methods and procedures that are necessary to bring an endangered or threatened species to the point at which the measures provided pursuant to the Act are no longer necessary. Such methods and procedures include, but are not limited to, all activities associated with scientific resources management such as research, census, law enforcement, habitat acquisition and maintenance, propagation, live trapping, and transplantation, and, in the extraordinary case where population pressures within a given ecosystem cannot be otherwise relieved, may include regulated taking.

Critical habitat receives protection under section 7 of the Act through the requirement that Federal agencies ensure, in consultation with the Service, that any action they authorize, fund, or carry out is not likely to result in the destruction or adverse modification of critical habitat. The designation of critical habitat does not affect land

ownership or establish a refuge, wilderness, reserve, preserve, or other conservation area. Such designation does not allow the government or public to access private lands. Such designation does not require implementation of restoration, recovery, or enhancement measures by non-Federal landowners. Where a landowner requests Federal agency funding or authorization for an action that may affect a listed species or critical habitat, the consultation requirements of section 7(a)(2) of the Act would apply, but even in the event of a destruction or adverse modification finding, the obligation of the Federal action agency and the landowner is not to restore or recover the species, but to implement reasonable and prudent alternatives to avoid destruction or adverse modification of critical habitat.

Under the first prong of the Act's definition of critical habitat, areas within the geographical area occupied by the species at the time it was listed are included in a critical habitat designation if they contain physical or biological features (1) which are essential to the conservation of the species and (2) which may require special management considerations or protection. For these areas, critical habitat designations identify, to the extent known using the best scientific data available, those physical or biological features that are essential to the conservation of the species (such as space, food, cover, and protected habitat). In identifying those physical and biological features within an area, we focus on the principal biological or physical constituent elements (primary constituent elements such as roost sites, nesting grounds, seasonal wetlands, water quality, tide, soil type) that are essential to the conservation of the species. Primary constituent elements are those specific elements of the physical or biological features that

provide for a species' life-history processes and are essential to the conservation of the species.

Under the second prong of the Act's definition of critical habitat, we can designate critical habitat in areas outside the geographical area occupied by the species at the time it is listed, upon a determination that such areas are essential for the conservation of the species. For example, an area currently occupied by the species but that was not occupied at the time of listing may be essential to the conservation of the species and may be included in the critical habitat designation. We designate critical habitat in areas outside the geographical area occupied by a species only when a designation limited to its range would be inadequate to ensure the conservation of the species.

Section 4(b)(2) of the Act requires that we designate critical habitat on the basis of the best scientific data available. Further, our Policy on Information Standards Under the Endangered Species Act (published in the **Federal Register** on July 1, 1994 (59 FR 34271)), the Information Quality Act (section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001 (Pub. L. 106-554; H.R. 5658)), and our associated Information Quality Guidelines, provide criteria, establish procedures, and provide guidance to ensure that our decisions are based on the best scientific data available. They require our biologists, to the extent consistent with the Act and with the use of the best scientific data available, to use primary and original sources of information as the basis for recommendations to designate critical habitat.

When we determine which areas should be designated as critical habitat, our primary source of information is generally the information developed during the listing process for the species. Additional information sources may include articles in peer-reviewed journals, conservation plans developed by States and counties, scientific status surveys and studies, biological assessments, or other unpublished materials and expert opinion or personal knowledge.

We recognize that critical habitat designated at a particular point in time may not include all of the habitat areas that we may later determine are necessary for the recovery of the species. For these reasons, a critical habitat designation does not signal that habitat outside the designated area is unimportant or may not be needed for recovery of the species. Areas that are important to the conservation of the species, both inside and outside the critical habitat designation, will continue to be subject to: (1) Conservation actions implemented under section 7(a)(1) of the Act, (2) regulatory protections afforded by the requirement in section 7(a)(2) of the Act for Federal agencies to ensure their actions are not likely to jeopardize the continued existence of any endangered or threatened species, and (3) section 9 of the Act's prohibitions on taking any individual of the species, including taking caused by actions that affect habitat. Federally funded or permitted projects affecting listed species outside their designated critical habitat areas may still result in jeopardy findings in some cases. These protections and conservation tools will continue to contribute to recovery of this species. Similarly, critical habitat designations made on the basis of the best available information at the time of designation will not control the direction and substance of future recovery plans, habitat

conservation plans (HCPs), or other species conservation planning efforts if new information available at the time of these planning efforts calls for a different outcome.

### **Prudency Determination**

Section 4(a)(3) of the Act, as amended, and implementing regulations (50 CFR 424.12), require that, to the maximum extent prudent and determinable, the Secretary shall designate critical habitat at the time the species is determined to be an endangered or threatened species. Our regulations (50 CFR 424.12(a)(1)) state that the designation of critical habitat is not prudent when one or both of the following situations exist:

- (1) The species is threatened by taking or other human activity, and identification of critical habitat can be expected to increase the degree of threat to the species, or
  - (2) Such designation of critical habitat would not be beneficial to the species.

There is no imminent threat of take attributed to collection or vandalism for either of these species, and identification and mapping of critical habitat is not expected to initiate any such threat. In the absence of finding that the designation of critical habitat would increase threats to a species, if there are any benefits to a critical habitat designation, then a prudent finding is warranted. Here, the potential benefits of designation include: (1) Triggering consultation under section 7 of the Act, for actions in which there may be a Federal nexus where it would not otherwise occur because, for example, the critical habitat has become unoccupied or the occupancy is in question; (2)

focusing conservation activities on the species' most essential habitat features and areas; and (3) providing educational benefits to State or County governments or private entities. Therefore, because we determined that the designation of critical habitat will not likely increase the degree of threat to the species and may provide some measure of benefit, we find that designation of critical habitat is prudent for Graham's beardtongue and White River beardtongue.

### Critical Habitat Determinability

Having determined that designation is prudent, under section 4(a)(3) of the Act we must find whether critical habitat for these two species is determinable. Our regulations at 50 CFR 424.12(a)(2) state that critical habitat is not determinable when one or both of the following situations exist:

- (i) Information sufficient to perform required analyses of the impacts of the designation is lacking, or
- (ii) The biological needs of the species are not sufficiently well known to permit identification of an area as critical habitat.

When critical habitat is not determinable, the Act allows the Service an additional year to publish a critical habitat designation (16 U.S.C. 1533(b)(6)(C)(ii)).

We reviewed the available information pertaining to the biological needs of the

species and habitat characteristics where these species are located. This and other information represent the best scientific data available and led us to conclude that the designation of critical habitat is determinable for Graham's beardtongue and White River beardtongue.

## Physical or Biological Features

In accordance with section 3(5)(A)(i) and 4(b)(1)(A) of the Act and regulations at 50 CFR 424.12, in determining which areas within the geographical area occupied by the species at the time of listing to designate as critical habitat, we consider the physical or biological features that are essential to the conservation of the species and which may require special management considerations or protection. These include, but are not limited to:

- (1) Space for individual and population growth and for normal behavior;
- (2) Food, water, air, light, minerals, or other nutritional or physiological requirements;
  - (3) Cover or shelter;
  - (4) Sites for breeding, reproduction, or rearing (or development) of offspring; and
- (5) Habitats that are protected from disturbance or are representative of the historic geographical and ecological distributions of a species.

We derive the specific physical and biological features essential for Graham's

beardtongue and White River beardtongue from studies of these species' habitat, ecology, and life history as described in our proposal to list the species as threatened published elsewhere in today's **Federal Register**.

Graham's Beardtongue

We determined that Graham's beardtongue requires the physical and biological features described below.

Space for Individual and Population Growth and for Normal Behavior

Plant Community. Graham's beardtongue is associated with a suite of species similarly adapted to xeric growing conditions on highly basic calcareous (containing calcium carbonate) shale soils (for more discussion, see "Soils" below). The vascular plant species most frequently associated with Graham's beardtongue include saline wild-rye (Leymus salina), spiny greasebush (Glossopetalon spinescens var. meionandra), Utah juniper (Juniperus osteosperma), shadscale saltbush (Atriplex confertifolia), twoneedle piñon (Pinus edulis), mountain thistle (Cirsium scopulorum), ephedra buckwheat (Eriogonum ephedroides), sulfur flower buckwheat (Eriogonum umbellatum), Colorado feverfew (Parthenium ligulatum), and Fremont's wild-buckwheat (Eriogonum corymbosum) (UNHP 2013, entire). Graham's beardtongue sites at higher elevation can be found within sparse piñon-juniper woodland dominated by Utah juniper and piñon pine. Graham's beardtongue sites at lower elevations are occasionally within a sparse

desert shrubland dominated by shadscale saltbush.

Within these plant communities, Graham's beardtongue is found in open or sparsely vegetated, raw shale areas. Dwarf shrubs and cushion-like herbs make up the distinctive plant community type occurring on these calcareous shale sites. The following species are in part co-occurring with Graham's beardtongue and are similarly endemic and totally restricted to the Green River Geologic Formation: Dragon milkvetch (Astragalus lutosus), oilshale columbine (Aquilegia barnebyi), Barneby's thistle (Cirsium barnebyi), oilshale cryptantha (Cryptantha barnebyi), Graham's cryptantha (Cryptantha grahamii), Rollins' cryptantha (Cryptantha rollinsii), ephedra buckwheat, and White River beardtongue. Intact native plant communities immediately adjacent to Graham's beardtongue shale habitat are also important to prevent the encroachment of invasive weeds into this habitat (Service 2012b, entire).

The long-term viability of Graham's beardtongue is dependent on having a diverse plant community that supports pollinators, even if that plant community is sparse (see *Reproduction*, below). Flowering in Graham's beardtongue can be highly unreliable year-to-year, so pollinators of this species are likely to rely on nearby plants as a food source in years when Graham's beardtongue does not flower very much (Dodge and Yates 2008, p. 30). Therefore, based on the information above, we identify sparsely vegetated, barren shales with a diverse plant community dominated by the dwarf shrubs, cushion-like plants, and endemic species listed above to be a physical or biological feature for this species.

Slope and Topography. Throughout this proposed rule, we will refer to points, which are data that represent a physical location where one or more plants were observed on the ground. Point data are usually collected by GPS and stored as a "record" in a geographic information system (GIS) database. We mapped all plant points and grouped them into populations following standardized methods used by the national network of Natural Heritage Programs (see the proposed listing rule published elsewhere in today's Federal Register). About a third of all known Graham's beardtongue point locations in our files grow on slopes that are 10 degrees or less, with an average slope across all known points of 17.6 degrees (Service 2013, p. 2). Graham's beardtongue grows on slopes ranging from 0 to 73 degrees, although occurrences on steeper slopes are rare. Ninety-five percent of the known points are on slopes that are 40 degrees or less (GIS analysis 2013). Individuals of Graham's beardtongue usually grow on southwest-facing exposures (GIS analysis 2013). Therefore, we identify southwest-facing slopes of less than 40 degrees to be a physical or biological feature for this species.

Food, Water, Air, Light, Minerals, or Other Nutritional or Physiological Requirements

Soils and Geology. Graham's beardtongue is found on highly basic soils derived from strata of the Green River Formation (Shultz and Mutz 1979, p. 40; Neese and Smith 1982, p. 64). These soils provide the root microhabitat essential for the species' growth and reproduction. These soils are very shallow with virtually no soil horizon development. The little soil above the consolidated calcareous shale rock of its parent

material is usually very light clay derived from thinly bedded shale. The soil surface is covered with shale channers (thin, flat fragments up to 15 cm (6 in) long, usually less than 5 cm (2 in) across), underlain with larger shale fragments to a depth of 5 to 10 cm (2 to 4 in). The shale channers usually weather to a light tan color. Freshly broken channers exhibit a very dark brown interior due to the high organic content of the kerogen (the hydrocarbons from plant material that are the main source of oil in oil shales).

The majority of Graham's beardtongue populations and those with the largest numbers of plants occur on the oil-shale-rich Mahogany ledge, which is the outcrop of the richest oil shale bed of the Parachute Creek Member of the Green River Formation (Cashion 1967, p. 1; Shultz and Mutz 1979, p. 40). Water can collect (called "perching") on the Mahogany zone, and Graham's beardtongue may be adapted to access water through this natural process (Shultz and Mutz 1979, p. 40; Service 2012b, entire). The remaining occurrences are associated with upper members of the Green River Formation as described by Weiss and Witkind (Weiss *et al.* 1990, entire; Remy 1992, p. BB18). Therefore, based on the information above, we identify the upper Green River Formation oil shale soils as a physical or biological feature for this species.

Climate. Graham's beardtongue is adapted to a cold desert climate, with most precipitation occurring in the spring and fall, and snow cover from December through March (Western Regional Climate Center 2013, entire). Winter snow cover may be important for this species by preventing severe frost damage to plants during the coldest

months (Bannister *et al.* 2005, pp. 250-1). Temperatures can be extreme, with average summer highs around 34 degrees Celsius (°C) (93 degrees Fahrenheit (°F)) and average winter lows around -14 °C (7 °F) (Western Regional Climate Center 2013, entire). Graham's beardtongue seeds need at least 45 to 90 consecutive days at less than 4 °C (40 °F) in order to germinate (Wilcox *et al.* undated, p. 5). Average annual precipitation across the range of this species varies from 15 to 30 cm (6 to 12 in) (GIS analysis 2013). Because Graham's beardtongue evolved under these climatic conditions, we identify suitable precipitation—15 to 30 cm (6 to 12 in) with most precipitation in spring and fall and snow cover from December through March—and suitable temperatures—average winter low temperature of -14 °C (7 °F) and average summer high of 34 °C (93 (°F)) with at least 45 to 90 consecutive days less than 4 °C (40 °F)—as physical or biological features for this plant. These climatic conditions are likely influenced, in part, by elevation.

#### Cover or Shelter

Seeds and seedlings of Graham's beardtongue require the right microclimate for germination and establishment. However, we do not know the specific requirements of Graham's beardtongue for suitable microsites, nor are these features likely to be manageable as a physical or biological feature for this species. Suitable conditions for seed germination and seedling establishment are further described in the *Plant Community* and *Soils and Geology* sections, above.

Reproduction. Graham's beardtongue can produce seeds through self-pollination, but is much more reproductively successful when it is cross-pollinated (Dodge and Yates 2009, p. 14). At least 11 different pollinator species visit Graham's beardtongue (England 2003, entire; Lewinsohn and Tepedino 2007, p. 235; Dodge and Yates 2008, p. 31), and there is no evidence of pollinator limitation for this species (Dodge and Yates 2008, p. 14). Pollinators include small to medium-sized solitary bees in the following genera: Agopostemon, Anthophora, Lasioglossum, and Osmia. A Penstemon-specializing wasp, Pseudomasaris vespoides, is likely the most common pollinator for P.grahamii (Lewinsohn and Tepedino 2005, p. 17). Larger bumblebees, such as Bombus huntii (Hunt's bumblebee), are also thought to pollinate Graham's beardtongue (England 2003, entire). These bees are mostly ground and twig-nesting bees (Dodge and Yates 2008, pp. 30-1).

Pollinators generally need a diversity of native plants whose blooming times overlap, nesting and egg-laying sites with appropriate nesting materials, undisturbed shelter for overwintering, and a landscape free of poisonous chemicals (Shepherd *et al.* 2003, pp. 49-50). Intact native plant communities that connect populations of rare plants are also important, as anthropogenic disturbances may be a barrier to pollinator movement (Bhattacharya *et al.* 2003, pp. 42-43). As previously described (see Space for Individual and Population Growth and for Normal Behavior, above), Graham's beardtongue individuals are sparsely distributed and flowering can be irregular.

Populations of other beardtongue species in areas adjacent to Graham's beardtongue occupied habitat are essential to support the pollinating wasp's (*Pseudomasaris vespoides*) population during periods of poor Graham's beardtongue floral availability (Lewinsohn and Tepedino 2007, p. 236). Protecting these species and intact native plant communities maintains connectivity between areas, allowing pollinators to move between or within populations. These beardtongue species include thickleaf beardtongue (*Penstemon pachyphyllus*), Fremont's beardtongue (*P. fremontii*), Rocky Mountain beardtongue (*P. strictus*), and White River beardtongue (*P. scariosus*, not to be confused with *P. scariosus* var. *albifluvis*). Because the evidence presented above indicates that pollinators are necessary to maximize successful reproduction of Graham's beardtongue, we have identified pollinators and their associated habitats as a physical or biological feature for this species.

In general, pollinators will focus on small areas where floral resources are abundant; however, occasional longer distance pollination will occur. Typically, pollinators fly distances that are in relation to their body sizes, with smaller pollinators flying shorter distances than larger pollinators (Greenleaf *et al.* 2007, pp. 589-96). Using available information, we extrapolated likely travel distances of Graham's beardtongue pollinators based on their medium to large body sizes. The body size of Graham's beardtongue pollinators allows for travel distances of approximately 700 m (2,297 ft) (Service 2012a, p. 8).

If a pollinator can fly long distances, pollen transfer is also possible across these

distances. In the interest of protecting pollinators of Graham's beardtongue, and thus genetic flow between individuals and reproduction for this species, we identified a 700-m (2,297-ft) area beyond occupied habitat to conserve the pollinators essential for plant reproduction. These pollinator habitat areas have the added benefit of potentially providing more habitat for Graham's beardtongue to expand into, and add protection against encroachment by invasive weeds or other disturbance effects.

Habitats Protected from Disturbance or Representative of the Historic Geographical and Ecological Distributions of the Species

Intact Soils. Anthropogenic habitat fragmentation within Graham's beardtongue occupied habitat has not been severe. However, fragmentation is likely to increase in the future without additional protection. As an oil shale endemic, Graham's beardtongue is limited to a specific soil type and structure (see Soils and Geology, above). It is likely that once Graham's beardtongue habitat is disturbed through soil-disturbing activities such as oil shale development (see I. Energy Exploration and Development in our proposed listing rule published elsewhere in today's Federal Register), it is essentially lost to the species. In addition, restoration of native species in arid climates is difficult (Monsen 2004, p. 29). Maintaining intact shale soils where Graham's beardtongue grows is important to ensure viability of the species. We have identified intact soils within Graham's beardtongue occupied habitat and nearby plant communities is an important physical or biological feature for this species.

White River Beardtongue

We have determined that White River beardtongue requires the physical and biological features described below.

Space for Individual and Population Growth and for Normal Behavior

Plant Community. White River beardtongue is found in semi-barren openings of mixed desert shrub and piñon-juniper communities. The vascular plant species most frequently associated with White River beardtongue include Barneby's thistle, saline wild-rye, spiny greasebush, Utah juniper, twoneedle piñon, shadscale saltbush, Dragon milkvetch, Barneby's thistle, Barneby catseye, rayless tansy-aster (*Xanthisma grindelioides*), and Indian ricegrass (*Achnatherum hymenoides*) (UNHP 2013, entire).

Occasionally White River beardtongue is found with oilshale columbine and Graham's beardtongue (Franklin 1995, p. 5). Many of the other oil shale endemics found growing with Graham's beardtongue can be found with White River beardtongue, although White River beardtongue grows in slightly less sparse areas (see *Plant Community* for Graham's beardtongue, above, for a complete list (Neese and Smith 1982, p. 58)). We consider sparsely vegetated, barren shale dominated by the dwarf shrubs, cushion-like plants, and endemic species listed above to be a physical or biological feature for this species.

Slope and Topography. About one-fifth of all known point locations of White River beardtongue are on slopes of 10 degrees or less, with an average slope for all known points of 19.2 degrees (Service 2013, p. 3). This is somewhat steeper than the slopes on which Graham's beardtongue grows, although 95 percent of the known points are on slopes that are 33 degrees or less (GIS analysis 2013). Field observations also indicate that White River beardtongue grows on steeper slopes than Graham's beardtongue (Brunson 2012; Service 2012), but this hypothesis should be tested. White River beardtongue individuals usually grow on southwest-facing exposures (GIS analysis 2013). Therefore, we identify southwest-facing slope of less than 33 degrees to be a physical or biological feature for this species.

Food, Water, Air, Light, Minerals, or Other Nutritional or Physiological Requirements

Soils and Geology. White River beardtongue is restricted to calcareous soils derived from oil shale barrens of the Parachute Creek Member and other members of the Green River Formation in the Uinta Basin of northeastern Utah and adjacent Colorado. White River beardtongue is also associated with the Mahogany ledge (see Soils and Geology for Graham's beardtongue, above, for more details). White River beardtongue overlaps with Graham's beardtongue at some locations, and the soil types are basically the same, although White River beardtongue can also be found in red, fine-textured, shallow, soils. Based on the information above, we identify the Green River Formation oil shale soils as a physical or biological feature for this species.

*Climate.* White River beardtongue is adapted to the same climate as Graham's beardtongue—a cold desert climate, with most precipitation occurring in the spring and fall, and snow cover from December through March (Western Regional Climate Center 2013, entire). Winter snow cover may be important for this species as it can prevent severe frost damage to plants during the winter months (Bannister et al. 2005, p. 250-1). Temperatures can be extreme, with average summer highs around 34 degrees Celsius (°C) (93 degrees Fahrenheit (°F)) and average winter lows around -14 °C (7 °F) (Western Regional Climate Center 2013, entire). White River beardtongue seeds need at least 45 to 90 consecutive days at less than 4 °C (40 °F) to germinate (Wilcox et al. undated, p. 5). Average annual precipitation across the range of this species varies from 15 to 30 cm (6 to 12 in) (GIS analysis 2013). Because White River beardtongue evolved under these climatic conditions, we identify suitable precipitation—15 to 30 cm (6 to 12 in) with most precipitation in spring and fall and snow cover from December through March and suitable temperatures—average winter low temperature of -14 °C (7 °F) and average summer high of 34 °C (93 (°F)) with at least 45 to 90 consecutive days less than 4 °C (40 °F)—as physical or biological features for this plant. These climatic conditions are likely influenced, in part, by elevation.

#### Cover or Shelter

Seeds and seedlings of White River beardtongue require the right microclimate for germination and establishment. However, we do not know the specific requirements of White River beardtongue for suitable microsites, nor are these features likely to be manageable as a physical or biological feature for this species. Suitable conditions for seed germination and seedling establishment are further described in the *Plant Community* and *Soils and Geology* sections, above.

Sites for Breeding, Reproduction, or Rearing (or Development) of Offspring

Reproduction. Although White River beardtongue can produce seed through self-pollination, cross-pollination produces the most seed and fruits (Lewinsohn and Tepedino 2007, p. 234). At least 15 different pollinator species visit White River beardtongue, and there is no evidence of pollinator limitation for this species (Lewinsohn and Tepedino 2007). Pollinators include small to medium native solitary bees including Anthophora, Ceratina (carpenter bees), Halictus (sweat bees), Lasioglossum, and Osmia species.

Pseudomasaris vespoides (wasp) also pollinates White River beardtongue. These bees are mostly ground and twig-nesting bees (Dodge and Yates 2008, pp. 30-1).

Pollinators generally need a diversity of native plants whose blooming times overlap, nesting and egg-laying sites with appropriate nesting materials, undisturbed shelter for overwintering, and a landscape free of poisonous chemicals (Shepherd *et al.* 2003, pp. 49-50). Intact native plant communities that connect populations of rare plants are also important, as anthropogenic disturbances may be a barrier to pollinator movement (Bhattacharya *et al.* 2003, p. 42-3). Flowering in White River beardtongue is not as unreliable as that for Graham's beardtongue, although maintaining plant communities adjacent to occupied habitat are still important to maintain a diversity of

pollinators (Tepedino et al. 1997, p. 246) and to maintain connectivity between areas, allowing pollinators to move between sites within each population. Because the evidence presented above indicates that pollinators are necessary to maximize successful reproduction of White River beardtongue, we consider pollinators and their associated habitats as a physical or biological feature for this species.

Like Graham's beardtongue, we extrapolated likely travel distances of White River beardtongue pollinators based on their small to medium body sizes. A notable exception to pollinators observed on White River beardtongue is that *Bombus* spp. and other large bees do not visit these flowers. This observation is not surprising given the relatively smaller size of the flower compared to other beardtongues like Graham's beardtongue. In the interest of protecting pollinators of White River beardtongue, and thus genetic flow between individuals and reproduction for this species, we identified a 500-m (1,640-ft) area beyond occupied habitat to conserve the pollinators essential for plant reproduction. We based this distance on the fact that small to medium species visit White River beardtongue, and these species are likely capable of travelling a distance of 500 m (1,640 ft) between plants or from nesting sites to plants. These pollinator habitat areas have the added benefit of potentially providing more habitat for White River beardtongue to expand into, and add protection against encroachment by invasive weeds or other disturbance effects.

Habitats Protected from Disturbance or Representative of the Historic Geographical and Ecological Distributions of the Species

Intact Soils. Anthropogenic habitat fragmentation within White River beardtongue occupied habitat has not been severe. However, fragmentation is likely to increase in the future without sufficient protection. As an oil shale endemic, White River beardtongue is limited to a specific soil type and structure (see Soils and Geology, above). It is likely that once White River beardtongue's habitat is disturbed through soil-removing activities such as oil shale development, it is essentially lost to the species (see I. Energy Exploration and Development in our proposed listing rule published elsewhere in today's Federal Register). In addition, restoration of native species in arid climates is difficult (Monsen 2004, p. 29). Maintaining intact shale soils where White River beardtongue grows is important to ensure viability of the species. We have identified intact soils within White River beardtongue occupied habitat and nearby plant communities as an important physical or biological feature for this species.

Primary Constituent Elements for Graham's Beardtongue

Under the Act and its implementing regulations, we are required to identify the physical or biological features essential to the conservation of Graham's beardtongue in areas occupied at the time of listing, focusing on the features' primary constituent elements. We consider primary constituent elements to be those specific elements of the physical or biological features that provide for a species' life-history processes and are essential to the conservation of the species.

Based on our current knowledge of the physical or biological features and habitat characteristics required to sustain the species' life-history processes, we determine that the primary constituent elements specific to Graham's beardtongue are:

- (1) Plant community.
  - a. Barren areas with little, but diverse, plant cover.
- b. Presence of dwarf shrubs and cushion-like, oil shale endemic plants, including Dragon milkvetch (*Astragalus lutosus*), oilshale columbine (*Aquilegia barnebyi*), Barneby's thistle (*Cirsium barnebyi*), oilshale cryptantha (*Cryptantha barnebyi*), Graham's cryptantha (*Cryptantha grahamii*), Rollins' cryptantha (*Cryptantha rollinsii*), ephedra buckwheat (*Eriogonum ephedroides*), and White River beardtongue (*Penstemon scariosus* var. *albifluvis*).
- c. Intact, surrounding, native plant community to support pollinators and protect from the encroachment of invasive weeds and other potential threats.
  - (2) *Slopes and topography.* 
    - a. Southwest- to western-facing slopes.
    - b. Slopes of less than 40 degrees; average slope of 17.6 degrees.
  - (3) *Soils and geology.*
- a. Parachute Creek Member and other upper members of the Green River Geologic Formation.
- b. Appropriate soil morphology characterized by shallow soils with virtually no soil horizon development, with a surface usually covered by broken shale channers or light clay derived from the thinly bedded shale.

- c. Intact soils with minimal anthropogenic disturbance (at or below current levels) within Graham's beardtongue occupied habitat and nearby plant communities.
- (4) *Climate*. A cold desert climate with the same conditions under which the species evolved and is typical for the area. Annual precipitation of 15 to 30 cm (6 to 12 inches) with most precipitation in spring and fall and snow cover from December through March. Average winter low temperature of -14 °C (7 °F) and average summer high of 34 °C (93 (°F)) with at least 45 to 90 consecutive days less than 4 °C (40 °F).
  - (5) Habitat for pollinators.
- a. Ground and twig nesting areas for pollinators. A diverse mosaic of native plant communities that include flowering plants that provide nectar and pollen for a wide array of pollinator species.
- b. Connectivity between areas allowing pollinators to move from one site to the next within each population.
- c. A 700-m (2,297-ft) area beyond occupied habitat to conserve the pollinators essential for plant reproduction.

Primary Constituent Elements for White River Beardtongue

Under the Act and its implementing regulations, we are required to identify the physical or biological features essential to the conservation of White River beardtongue in areas occupied at the time of listing, focusing on the features' primary constituent elements. We consider primary constituent elements to be those specific elements of the physical or biological features that provide for a species' life-history processes and are

essential to the conservation of the species. In addition, primary constituent elements for White River beardtongue are nearly identical in some cases to those for Graham's beardtongue. We note explicitly where differences exist.

Based on our current knowledge of the physical or biological features and habitat characteristics required to sustain the species' life-history processes, we determine that the primary constituent elements specific to White River beardtongue are:

- (1) Plant community.
  - a. Barren areas with little, but diverse, plant cover.
- b. Presence of dwarf shrubs and cushion-like, oil shale endemic plants, including Dragon milkvetch (*Astragalus lutosus*), oilshale columbine (*Aquilegia barnebyi*), Barneby's thistle (*Cirsium barnebyi*), oilshale cryptantha (*Cryptantha barnebyi*), Graham's cryptantha (*Cryptantha grahamii*), Rollins' cryptantha (*Cryptantha rollinsii*), ephedra buckwheat (*Eriogonum ephedroides*), and occasionally Graham's beardtongue (*Penstemon grahamii*).
- c. Intact, surrounding, native plant community to support pollinators and protect from the encroachment of invasive weeds and other potential threats.
  - (2) *Slopes and topography.* 
    - a. South- to southwest-facing slopes.
    - b. Slopes of less than 33 degrees; average slope of 19.2 degrees.
  - (3) Soils and geology.
    - a. Parachute Creek Member and other upper members of the Green River

Geologic Formation.

- b. Appropriate soil morphology characterized by shallow soils with virtually no soil horizon development, with a surface usually covered by broken shale channers or light clay derived from the thinly bedded shale.
- c. Intact soils with minimal anthropogenic disturbance (at or below current levels) within White River beardtongue occupied habitat and nearby plant communities.
- (4) *Climate*. A cold desert climate with the same conditions under which the species evolved and is typical for the area. Annual precipitation of 15 to 30 cm (6 to 12 inches) with most precipitation in spring and fall and snow cover from December through March. Average winter low temperature of -14 °C (7 °F) and average summer high of 34 °C (93 (°F)) with at least 45 to 90 consecutive days less than 4 °C (40 °F).
  - (5) Habitat for pollinators.
- a. Ground and twig nesting areas for pollinators. A diverse mosaic of native plant communities that include flowering plants that provide nectar and pollen for a wide array of pollinator species.
- b. Connectivity between areas allowing pollinators to move from one site to the next within each population.
- c. A 500-m (1,640-ft) area beyond occupied habitat to conserve the pollinators essential for plant reproduction.

Special Management Considerations or Protection

When designating critical habitat, we assess whether the specific areas within the geographical area occupied by the species at the time of listing contain features which are essential to the conservation of the species and which may require special management considerations or protection. A detailed discussion of the current and future threats to Graham's beardtongue and White River beardtongue can be found in the proposed listing rule, which is published elsewhere in today's **Federal Register**. The primary threats impacting the physical and biological features essential to the conservation of Graham's beardtongue and White River beardtongue that may require special management considerations or protection within the proposed critical habitat include, but are not limited to, energy exploration and development, the cumulative impacts of increased energy development, livestock grazing, invasive weeds, small population sizes, and climate change (for a complete discussion, please see our proposed listing rule published elsewhere in today's **Federal Register**).

Special management considerations or protections are required within critical habitat areas to address these threats. Management activities that could ameliorate these threats include (but are not limited to): Develop regulations and agreements to balance conservation with energy development and minimize its effects in Graham's beardtongue and White River beardtongue habitat; avoid placing roads and energy facilities in habitats that would affect these species or their pollinators; minimize livestock use that disturb the soil or seeds; minimize habitat fragmentation; establish permanent conservation easements or land acquisitions to protect the species on non-federal lands; and eliminate or avoid activities that alter the morphology of shale slopes.

These management activities will protect the primary constituent elements for the species by preventing the loss of habitat and individuals, preserving these species' habitats and soils, maintaining native plant communities and natural levels of competition, and protecting these species' reproduction by protecting their pollinators.

### Criteria Used To Identify Critical Habitat

As required by section 4(b)(2) of the Act, we use the best scientific data available to designate critical habitat. We review available information pertaining to the habitat requirements of the species. In accordance with the Act and its implementing regulation at 50 CFR 424.12(e), we consider whether designating additional areas—outside those currently occupied as well as those occupied at the time of listing—are necessary to ensure the conservation of the species. We are not proposing to designate any areas outside the geographical area currently occupied by Graham's beardtongue or White River beardtongue because occupied areas are sufficient for the conservation of these species.

Conserving imperiled species can be accomplished by following the three Rs: representation, resiliency, and redundancy (Shaffer and Stein 2000). Representation, or preserving some of everything, means conserving not just a species but its associated plant communities, pollinators, and pollinator habitats. We addressed representation through our primary constituent elements for each species as discussed above,

specifically by ensuring sufficient habitat for their pollinators. Resiliency and redundancy ensure there is enough of a species so that it can survive into the future. Resiliency means ensuring that the habitat is adequate for a species and its representative components. Redundancy ensures an adequate number of sites and individuals. This methodology has been widely accepted as a reasonable conservation methodology (Tear *et al.* 2005, p. 841).

Critical habitat was identified by compiling all known locations for each species and delineating suitable habitat adjacent to the known locations to provide a sufficient area for pollinator habitat. Pollinator habitat areas for Graham's beardtongue were delineated using a 700-m (2,297-ft) distance from known locations. Pollinator habitat areas for White River beardtongue were delineated using a 500-m (1,640-ft) distance from known locations. These distances were based on how far the primary pollinators can travel for each of the species (see *Reproduction* above for each species for more information).

Given the total population numbers of each species, we believe the areas we propose to designate as critical habitat for Graham's beardtongue and White River beardtongue would also preserve redundancy and resilience. As described in our listing proposed rule, published elsewhere in today's **Federal Register**, White River beardtongue has 11,423 known plants distributed in 7 populations, and Graham's beardtongue has 31,702 known plants distributed in 24 populations. We conclude that both species are currently viable, but that their viability will be substantially decreased in

the future, mainly because of the threat of energy development. We consider a species viable if it can persist over the long term, thus avoiding extinction. A species can be conserved (and is thus viable) if it has representation, resiliency, and redundancy (Shaffer and Stein 2000), as explained earlier.

As described in our listing proposed rule, published elsewhere in today's **Federal Register**, the total population of White River beardtongue may be as high as 25,000

plants (Franklin 1995, entire); additional surveys are likely to locate more plants and additional populations within the boundaries of the proposed critical habitat. Our proposed critical habitat includes all verified populations of both species and additional suitable habitats into which the species populations can expand. Therefore, we conclude that our proposed critical habitat boundaries would be sufficient to ensure species viability for both species over the long term.

When determining proposed critical habitat boundaries, we did not attempt to avoid developed areas such as lands covered by buildings, pavement, and other structures because minimal development exists within habitat for these two species. Although any developed areas lack the physical or biological features necessary for Graham's and White River beardtongues, both of these species grow in remote areas that have not yet experienced considerable development and, for the most part, have few developed roads crossing through them at this time. However, any developed lands occurring inside the critical habitat boundaries shown on the maps of this proposed rule are excluded by text in this proposed rule and are not proposed for designation as critical habitat. Therefore, if

the critical habitat is finalized as proposed, a federal action involving already developed areas would not, in most cases, trigger section 7 consultation.

We delineated the proposed critical habitat unit boundaries for Graham's beardtongue and White River beardtongue using the following steps:

- (1) We mapped all plant points on file (using ArcMap 10.0) at the Utah Natural Heritage Program (UNHP), Colorado Natural Heritage Program (CNHP), and the BLM (see the proposed listing rule published elsewhere in today's **Federal Register** for more details). These data consist of point locations collected over several decades by organizations, agencies, or consultants.
- (2) For Graham's beardtongue, we examined Bing Maps Aerial imagery (provided with ArcMap 10.0 software) and excluded all GIS locations that were collected prior to the year 2000, and that were farther than 50 m (164 ft) from suitable habitat. Locations collected prior to 2000 within 50 m (164 ft) of suitable habitat were retained in our dataset (GIS analysis 2013). If it was not clear from looking at the aerial imagery whether the point was in suitable habitat, we erred on the side of the species and included the point in our proposed critical habitat areas.

Through this process, we removed 15 point locations from our Graham's beardtongue dataset. Most of the historical points that we removed overlapped or were very close to recently collected data. We removed a historical point from Carbon County from our

proposed critical habitat area that has not been revisited for more than 30 years, even though this is the only point in that county. We acknowledge that there is potential habitat in the area, but this point needs to be revisited to confirm whether the species is present near this location.

For White River beardtongue, we did not remove any historical points because they all appeared to be within or adjacent to suitable habitat. The exception is 16 points from herbaria records ranging from the vicinity of Bitter Creek west to Willow Creek, which we have not confirmed as White River beardtongue and therefore do not include in proposed critical habitat for this plant.

(3) For Graham's beardtongue data from Utah, we created proposed critical habitat areas by including all pollinator habitat within 700 m (2,297 ft) around each point. We then dissolved boundaries between the overlapping polygons. We did not have as complete a dataset for Colorado as for Utah, so we combined all of the point and polygon data we received from the CNHP, and calculated pollinator habitat areas within 700 m (2,297 ft) (see Sites for Breeding, Reproduction, or Rearing (or Development) of Offspring, above). We also created our own polygon to incorporate suitable habitat on Raven Ridge, which we identified via aerial imagery.

We followed a similar protocol for White River beardtongue, but instead created pollinator habitat areas within 500 m (1,640 ft) around all points. We did this for both Utah and Colorado points.

(4) Critical habitat units are not one contiguous unit; rather, each contains several polygons. Each polygon is a subunit containing the PCEs within the larger unit that contain the essential features and are occupied. Proposed units are separated from each other by either relatively great distance or by geographic features. Units for Graham's beardtongue are essentially the same as in the January 19, 2006, proposed rule (71 FR 3158), although the proposed unit boundaries are expanded slightly to include new data. Proposed units for White River beardtongue are delineated based on geographic features that separated polygons.

We are proposing for designation as critical habitat lands that we have determined are occupied and contain sufficient elements of physical or biological features to support life-history processes essential for the conservation of Graham's and White River beardtongues.

The proposed critical habitat designation is defined by the map or maps, as modified by any accompanying regulatory text, presented at the end of this document in the rule portion. We include more detailed information on the boundaries of the critical habitat designation in the preamble of this document. We will make the coordinates or plot points that the maps are based on available to the public at <a href="http://www.regulations.gov\_at Docket No.FWS-R6-ES-2013-0082">http://www.regulations.gov\_at Docket No.FWS-R6-ES-2013-0082</a>, on our Internet site at <a href="http://www.fws.gov/utahfieldoffice">http://www.fws.gov/utahfieldoffice</a>, and at the field office responsible for the designation (see **FOR FURTHER INFORMATION CONTACT** above).

# **Proposed Critical Habitat Designation**

Graham's beardtongue

We are proposing five units as critical habitat for Graham's beardtongue, which are the same units we proposed in 2006, although the boundaries of each unit have changed (71 FR 3158, January 19, 2006). The critical habitat units we describe below constitute our best assessment of areas that meet the definition of critical habitat for Graham's beardtongue. The five units we propose as critical habitat are: (1) Sand Wash, (2) Seep Ridge, (3) Evacuation Creek, (4) White River, and (5) Raven Ridge. All of these units contain occupied Graham's beardtongue habitat. The approximate acreage and land ownership status of each proposed critical habitat unit is shown in Table 1.

TABLE 1. Acreage and land ownership status for the proposed critical habitat units for Graham's beardtongue. Area estimates reflect all land within critical habitat unit boundaries.

Critical Habitat Unit	Land Ownership	Size of Unit
1. Sand Wash	BLM	3,056 ha (7,550 ac)
	State	27 ha (66 ac)
	Private	76 ha (189 ac)
	Total	3,159 ha (7,805 ac)
2. Seep Ridge	BLM	6,649 ha (16,430 ac)
	State	2,650 ha (6,549 ac)
	Private	862 ha (2,131 ac)
	Total	10,162 ha (25,110 ac)
3. Evacuation Creek	BLM	3,879 ha (9,586 ac)
	State	1,417 ha (3,502 ac)
	Private	1,632 ha (4,033 ac)
	Total	6,929 ha (17,122 ac)
4. White River	BLM	2,243 ha (5,542 ac)
	State	401 ha (991 ac)
	Private	2,047 ha (5,059 ac)
	Total	4,691 ha (11,592 ac)
5. Raven Ridge	BLM	2,257 ha (5,578 ac)
	Private	304 ha (752 ac)

		Total	2,562 ha (6,330 ac)
Total Across All	BLM		18,084 ha (44,686 ac)
Units	State		4,495 ha (11,108 ac)
	Private		4,921 ha (12,164 ac)
		Total	27,502 ha (67,959 ac)

Note: Area sizes may not sum due to rounding.

We present brief descriptions of the proposed units, and reasons why they meet the definition of critical habitat for Graham's beardtongue, below. The units are listed in order geographically west to east, and north to south.

Unit 1: Sand Wash

The Sand Wash Unit is the westernmost proposed critical habitat unit found in the vicinity of Sand Wash in southwestern Uintah County and adjacent Duchesne County, Utah. This unit contains nine subunits, and each subunit is occupied and contains all of the physical and biological features essential to the conservation of the species, including outcrops of the Parachute Creek member and other upper members of the Green River Geologic Formation, the appropriate plant community including other oil shale endemics, a climate with 15 to 30 cm (6 to 12 in.) in annual precipitation, and intact pollinator habitat. This unit is occupied and includes approximately 62 Graham's beardtongue locations representing at least 1,156 plants and seven populations. This unit is the most geographically isolated from the other units and has minor differences in flower and

vegetation color from the remainder of Graham's beardtongue populations (Shultz and Mutz 1979, p. 41). These color differences may indicate that this unit, due to geographic isolation, is genetically divergent from the remainder of the species' population.

Factors affecting Graham's beardtongue within this unit, regardless of land ownership, include energy development, domestic livestock and native grazing and trampling, and road impacts, including road maintenance, increased fugitive dust, and spreading invasive weeds. A majority of this unit is managed by the BLM, where Graham's beardtongue receives some protection via a signed conservation agreement and as a BLM special status species (see Factor D in our proposed listing rule published elsewhere in today's **Federal Register** for more details).

No oil and gas wells are located within the Sand Wash Unit, although 66 percent of the area is leased for oil and gas. Private mineral rights do not require leases to develop and so are not included in the total. Oil shale and tar sand leases discussed include only Federal leases of oil shale and tar sands. None of the critical habitat in this unit falls within designated oil shale or tar sands areas. Nearly the entire unit is leased as grazing allotments. At least one class B (graveled) road and several class D roads pass through this unit. Class B roads are highways, roads, or streets designated and maintained by a county. Class D roads are unmaintained. OHV use and unauthorized collection have not been documented within the Sand Wash unit, although a major road runs through this unit and these stressors could potentially occur here. A cohesive management strategy will be necessary to reduce threats and protect the physical and

biological features essential to the conservation of the species.

### Unit 2: Seep Ridge

The Seep Ridge Unit occurs approximately 17 miles east of the Sand Wash Unit, in the vicinity of Buck, Sunday School, and Klondike Canyons near the Seep Ridge Road in south central Uintah County, Utah. This unit contains ten subunits, and each subunit is occupied and contains all of the physical and biological features essential to the conservation of the species including outcrops of the Parachute Creek member and other upper members of the Green River Geologic Formation, the appropriate plant community including other oil shale endemics, a climate with 20 to 30 cm (8 to 12 in) in annual precipitation, and intact pollinator habitat. This unit is occupied and includes approximately 1,442 Graham's beardtongue points representing at least 8,017 plants and seven populations.

Factors affecting Graham's beardtongue within this unit include energy development, domestic livestock and native grazing and trampling, and road impacts, including road maintenance, increased fugitive dust, and spreading invasive weeds. The Seep Ridge Unit is managed mostly by the BLM, although it includes the most State and Institutional Trust Lands (SITLA) lands managed by the State of Utah of any of the proposed units. The SITLA land in this unit contains occupied and suitable habitat (GIS analysis 2013). To date, SITLA has not provided protection to Graham's beardtongue on the lands it manages in the Uinta Basin where energy development exists.

Four producing gas wells occur across all ownerships within the Seep Ridge Unit (GIS analysis 2013). An additional 13 gas wells are in various states of abandonment (plugged and abandoned, operations suspended, or shut-in) but may have resulted in the loss of plants and their habitat when they were active. Approximately 30 percent of the Seep Ridge Unit is leased for traditional oil and gas development, and 38 percent falls within oil shale and tar sands lease areas (some of these lease areas overlap current oil and gas leases). Combined, about 56 percent of the Seep Ridge Unit is leased or open for leasing for energy development.

Several roads cross through the Seep Ridge Unit, including four class B (graveled) roads and at least eight class D roads. Seep Ridge Road crosses through a portion of one population of Graham's beardtongue. This road was paved and widened within occupied Graham's beardtongue habitat in 2012, and 33 Graham's beardtongue individuals were salvaged or transplanted as a result (see our proposed listing rule published elsewhere in today's **Federal Register** for more details). The entirety of this unit is leased as grazing allotments. OHV use and unauthorized collection have not been documented within the Seep Ridge unit, although several major roads run through this unit and these stressors could potentially occur here. A cohesive management strategy will be necessary to reduce threats and protect the physical and biological features essential to the conservation of the species.

*Unit 3: Evacuation Creek* 

The Evacuation Creek Unit occurs approximately 6 miles east of the Seep Ridge Unit, in the Asphalt Wash and Evacuation Creek drainages near the abandoned Gilsonite mining towns of Dragon and Rainbow. This unit is in southeastern Uintah County, Utah, and adjacent Rio Blanco County, Colorado. The Evacuation Creek Unit is occupied and contains the most individuals of Graham's beardtongue: approximately 1,375 points representing at least 15,077 plants and three populations. This unit contains four subunits, and each subunit is occupied and contains all of the physical and biological features essential to the conservation of the species including outcrops of the Parachute Creek member and other upper members of the Green River Geologic Formation, the appropriate plant community including other oil shale endemics, a climate with 20 to 30 cm (8 to 12 in) in annual precipitation, and intact pollinator habitat.

Factors affecting Graham's beardtongue within this unit include energy development, domestic livestock and native grazing and trampling, and road impacts, including road maintenance, increased fugitive dust, and spreading invasive weeds. Most of this unit is managed by the BLM, with some private and State lands. One producing gas well lies within the Evacuation Creek unit. An additional 17 wells are plugged and abandoned but may have resulted in the loss of plants and their habitat when they were active. Approximately 36 percent of the Evacuation Creek Unit is leased for traditional oil and gas development, and 39 percent falls within oil shale and tar sands lease areas (some of these lease areas overlap current oil and gas leases). Combined, about 69 percent of the Evacuation Creek Unit is leased or open for leasing for energy

development. The entire unit is leased as grazing allotments. Several roads cross through the Evacuation Creek Unit, including three class B (graveled) roads and at least eight class D roads. A cohesive management strategy will be necessary to reduce threats and protect the physical and biological features essential to the conservation of the species.

### Unit 4: White River

The White River Unit occurs approximately 3 miles north of the Evacuation Creek unit in Hells Hole and Weaver Canyons immediately south of the White River. This unit in eastern Uintah County, Utah, includes approximately 1,565 points representing at least 7,385 plants and one population. This unit contains four subunits, and each subunit is occupied and contains all of the physical and biological features essential to the conservation of the species including outcrops of the Parachute Creek member and other upper members of the Green River Geologic Formation, the appropriate plant community including other oil shale endemics, suitable elevation ranges of 1,484 to 2,113 m (4,869 to 6,932 ft), a climate with 20 to 30 cm (8 to 12 in.) in annual precipitation, and intact pollinator habitat.

Factors affecting Graham's beardtongue within this unit include energy development, domestic livestock and native grazing and trampling, and road impacts, including road maintenance, increased fugitive dust, and spreading invasive weeds.

Approximately 50 percent of this unit is managed by the BLM. The other 50 percent is

privately and State owned. No producing wells occur within the White River Unit.

Approximately 27 percent of the White River Unit is leased for traditional oil and gas development, and 22 percent falls within oil shale and tar sands lease areas (some of these lease areas overlap current oil and gas leases). Combined, about 43 percent of the White River Unit is leased or open for leasing for energy development. Although this critical habitat unit has less area available for oil shale and tar sands leasing than other critical habitat units, this unit includes a proposed oil shale mining project (Enefit) that is likely to impact 20 percent of the known individuals of Graham's beardtongue (see our proposed listing rule published elsewhere in today's **Federal Register** for more details).

Overall, the most substantial threat within the White River Unit is oil shale development. About half of this unit is in private or State ownership that is likely to be mined for oil shale in the future. Direct loss of habitat or individuals within this critical habitat unit is also likely to have impacts on the Evacuation Creek and Raven Ridge Units, as the White River Unit serves as an important connection between the Utah and Colorado populations of Graham's beardtongue.

This entire unit is leased as grazing allotments. A small portion of a class B (graveled) road and several class D roads pass through the White River Unit, but this unit is more remote than the other critical habitat units. A cohesive management strategy will be necessary to reduce threats and protect the physical and biological features essential to the conservation of the species.

The Raven Ridge Unit occurs approximately 4 miles northeast of the White River Unit along the west flank of Raven Ridge and north of the White River between Raven Ridge and the Utah border in extreme western Rio Blanco County, Colorado. This unit includes approximately 11 points representing at least 33 plants and four populations. Although population estimates within this unit in 2006 were 200 plants, more recent surveys have not located as many individuals. This unit contains three subunits, and each subunit is occupied and contains all of the physical and biological features essential to the conservation of the species including outcrops of the Parachute Creek member and other upper members of the Green River Geologic Formation, the appropriate plant community including other oil shale endemics, a climate with 15 to 30 cm (6 to 12 in.) in annual precipitation, and intact pollinator habitat.

Factors affecting Graham's beardtongue within this unit include energy development, domestic livestock and native grazing and trampling, and road impacts, including road maintenance, increased fugitive dust, and spreading invasive weeds. This unit is primarily managed by the BLM, with some private lands.

Sixty percent of this unit is within the BLM Raven Ridge Area of Critical Environmental Concern (ACEC), which was established to protect listed, candidate, and BLM-sensitive species. The ACEC restricts motorized travel to existing roads and trails and includes a no surface occupancy (NSO) stipulation for new oil and gas leases within

the ACEC (BLM 1997, p. 2-19, 2-44). Although the Raven Ridge ACEC sets out goals for a management plan for the area, BLM has not completed a formal management plan for this area.

No producing wells occur within the Raven Ridge Unit, although two abandoned wells may have resulted in the loss of plants and their habitat when they were active. Approximately 27 percent of the Raven Ridge Unit is leased for traditional oil and gas development, but none of this unit falls within oil shale and tar sands lease areas. An additional 30 percent of the Raven Ridge ACEC was proposed for leasing in 2013, but the lease sale is now deferred for further analysis (BLM 2013, entire). The entirety of this unit is leased as grazing allotments. One class B road passes through the Raven Ridge Unit. Overall, a cohesive, unit-wide management strategy is still needed to protect Graham's beardtongue across the entire unit.

### White River Beardtongue

We are proposing three units as critical habitat for White River beardtongue. The critical habitat areas we describe below constitute our best assessment of areas that meet the definition of critical habitat for White River beardtongue. The three units we propose as critical habitat are: (1) North Evacuation Creek, (2) Weaver Ridge, and (3) South Raven Ridge. All of these units are occupied by White River beardtongue. The approximate acreage of each proposed critical habitat unit is shown in Table 2.

TABLE 2. Acreage and land ownership status for the proposed critical habitat units for

White River beardtongue. Area estimates reflect all land within critical habitat unit boundaries.

Critical Habitat Unit	Land Ownership	Size of Unit
1. North Evacuation Creek	BLM	1,368 ha (3,382 ac)
	State	185 ha (457 ac)
	Private	1,415 ha (3,498 ac)
	Total	2,969 ha (7,336 ac)
2. Weaver Ridge	BLM	788 ha (1,946 ac)
	State	651 ha (1,608 ac)
	Private	1,397 ha (3,452 ac)
	Total	2,836 ha (7,006 ac)
3. South Raven Ridge	BLM	191 ha (472 ac)
	Private	41 ha (101 ac)
	Total	232 ha (573 ac)
Total Across All Units	BLM	2,347 ha (5,800 ac)
	State	836 ha (2,065 ac)
	Private	2,853 ha (7,051 ac)
	Total	6,036 ha (14,914 ac)

Note: Area sizes may not sum due to rounding.

We present brief descriptions of all units, and reasons why they meet the

definition of critical habitat for White River beardtongue, below. The units are listed in order geographically south to north. There is no obvious geographical or biological barrier between the Evacuation Creek and White River critical habitat units. We chose to separate these units based on splitting the known Utah populations into a northern half and a southern half. We also discuss where White River beardtongue critical habitat overlaps Graham's beardtongue critical habitat—approximately 54 percent of all proposed White River beardtongue critical habitat overlaps with Graham's beardtongue's proposed critical habitat.

#### Unit 1: North Evacuation Creek

The North Evacuation Creek Unit occurs about 11 km (7 miles) south and east of Bonanza, Utah, in the Asphalt Wash and Evacuation Creek drainages near the abandoned Gilsonite mining towns of Dragon and Rainbow. This unit is in southeastern Uintah County, Utah, and adjacent Rio Blanco County, Colorado. The North Evacuation Creek Unit contains approximately 259 points representing at least 6,820 plants and three populations. Fifty-three percent of this unit overlaps with Graham's beardtongue proposed critical habitat. This unit contains nine subunits, and each subunit is occupied and contains all of the physical and biological features essential to the conservation of the species including outcrops of the Parachute Creek member and other upper members of the Green River Geologic Formation, the appropriate plant community including other oil shale endemics, a climate with 20 to 30 cm (8 to 12 in) in annual precipitation, and intact pollinator habitat.

Factors affecting White River beardtongue within this unit include energy development, domestic livestock and native grazing and trampling, and road impacts, including road maintenance, increased fugitive dust, and spreading invasive weeds. This unit is split almost evenly by BLM and private landownership, with a small amount of State land. Four plugged and abandoned wells are located within the North Evacuation Creek Unit but may have resulted in the loss of plants and their habitat when they were active. Approximately 10 percent of the North Evacuation Creek Unit is leased for traditional oil and gas development, and 39 percent falls within oil shale and tar sands lease areas, with very little overlap between the two lease types. Additionally, a majority of the critical habitat areas included in this unit occurs on private land and is therefore not included in these lease totals. Combined, about 49 percent of the North Evacuation Creek unit is leased or open for leasing for energy development. The entire portion of this unit on BLM land is grazed. Several roads cross through the North Evacuation Creek unit, including four graveled, class B roads. A cohesive management strategy will be necessary to reduce threats and protect the physical and biological features essential to the conservation of the species.

### *Unit 2: Weaver Ridge*

The Weaver Ridge Unit occurs directly east and southeast of Bonanza, Utah, and immediately north of the North Evacuation Creek Unit. This unit is in southeastern Uintah County, Utah, and adjacent Rio Blanco County, Colorado. The Weaver Ridge

Unit includes approximately 319 points representing at least 4,575 plants and 3 populations. Fifty-five percent of this unit overlaps with proposed Graham's beardtongue critical habitat. This unit contains thirteen subunits, and each subunit is occupied and contains all of the physical and biological features essential to the conservation of the species including outcrops of the Parachute Creek member and other upper members of the Green River Geologic Formation, the appropriate plant community including other oil shale endemics, a climate with 15 to 30 cm (6 to 12 in.) in annual precipitation, and intact pollinator habitat.

Factors affecting White River beardtongue within this unit include energy development, domestic livestock and native grazing and trampling, and road impacts, including road maintenance, increased fugitive dust, and spreading invasive weeds. Most of this unit is privately owned, with some BLM and State land. Although most of the critical habitat within this unit occurs on private land, most of the known plant points occur on Federal lands. This is not surprising, as private lands are not typically surveyed, and we expect that additional surveys conducted on private lands would count many more individuals of White River beardtongue within this unit.

Two producing wells and three approved well locations are located within the Weaver Ridge Unit. Approximately 31 percent of the Weaver Ridge Unit is leased for traditional oil and gas development, and 19 percent falls within oil shale and tar sands lease areas. Combined, about 45 percent of the Weaver Ridge Unit is leased or, in the case of oil shale and tar sands development, designated for leasing for energy

development. The entire portion of the unit on BLM lands is grazed. A paved State road, the Bonanza Highway, crosses just through the edge of a critical habitat area within the Weaver Ridge Unit, and another paved class B road skirts another area. A cohesive management strategy will be necessary to reduce threats and protect the physical and biological features essential to the conservation of the species.

### Unit 3: South Raven Ridge

The South Raven Ridge Unit occurs about 10 km northeast of the Weaver Ridge Unit and about 11 km west of Rangely, Colorado, on the southern portion of Raven Ridge overlooking the White River. This unit is entirely within Rio Blanco County, Colorado. The South Raven Ridge Unit is the smallest unit for this species and contains 6 points representing at least 28 plants and 1 population. Fifty-nine percent of this unit overlaps with Graham's beardtongue critical habitat. This unit has all the physical and biological features essential to the conservation of the species including outcrops of the Parachute Creek member and other upper members of the Green River Geologic Formation, the appropriate plant community including other oil shale endemics, a climate with 15 to 30 cm (6 to 12 in) in annual precipitation, and intact pollinator habitat.

Factors affecting White River beardtongue within this unit include domestic livestock and native grazing and trampling, and some road impacts, including road maintenance, increased fugitive dust, and spreading invasive weeds. No oil or gas wells are located within the South Raven Ridge Unit. This unit is mostly on BLM lands with

some private lands. Approximately 20 percent of the South Raven Ridge Unit is leased for traditional oil and gas development. None of this unit falls within oil shale and tar sands lease areas. All of the BLM-managed lands in this unit are grazed. No major roads cross through this unit. Sixty-four percent of this unit is within the Raven Ridge ACEC (discussed above), with restricted motorized travel and NSO stipulations (BLM 1997, p. 2-19, 2-44). As described above, although the Raven Ridge ACEC sets out goals for a management plan for the area, BLM has not completed a formal management plan for this area. Overall, threats occur across the entire unit, and thus a cohesive management strategy will be necessary to reduce threats and protect the physical and biological features essential to the conservation of the species.

### **Effects of Critical Habitat Designation**

#### Section 7 Consultation

Section 7(a)(2) of the Act requires Federal agencies, including the Service, to ensure that any action they fund, authorize, or carry out is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of designated critical habitat of such species. In addition, section 7(a)(4) of the Act requires Federal agencies to confer with the Service on any agency action which is likely to jeopardize the continued existence of any species proposed to be listed under the Act or result in the destruction or adverse modification of proposed critical habitat.

Decisions by the 5<sup>th</sup> and 9<sup>th</sup> Circuit Courts of Appeals have invalidated our regulatory definition of "destruction or adverse modification" (50 CFR 402.02) (see *Gifford Pinchot Task Force* v. *U.S. Fish and Wildlife Service*, 378 F. 3d 1059 (9<sup>th</sup> Cir. 2004) and *Sierra Club* v. *U.S. Fish and Wildlife Service et al.*, 245 F.3d 434, 442 (5<sup>th</sup> Cir. 2001)), and we do not rely on this regulatory definition when analyzing whether an action is likely to destroy or adversely modify critical habitat. Under the statutory provisions of the Act, we determine destruction or adverse modification on the basis of whether, with implementation of the proposed Federal action, the affected critical habitat would continue to serve its intended conservation role for the species.

If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency (action agency) must enter into consultation with us. Examples of actions that are subject to the section 7 consultation process are actions on State, tribal, local, or private lands that require a Federal permit (such as a permit from the U.S. Army Corps of Engineers under section 404 of the Clean Water Act (33 U.S.C. 1251 *et seq.*) or a permit from the Service under section 10 of the Act) or that involve some other Federal action (such as funding from the Federal Highway Administration, Federal Aviation Administration, or the Federal Emergency Management Agency). Federal actions not affecting listed species or critical habitat, and actions on State, tribal, local, or private lands that are not federally funded or authorized, do not require section 7 consultation.

As a result of section 7 consultation, we document compliance with the

requirements of section 7(a)(2) through our issuance of:

- (1) A concurrence letter for Federal actions that may affect, but are not likely to adversely affect, listed species or critical habitat; or
- (2) A biological opinion for Federal actions that may affect, and are likely to adversely affect, listed species or critical habitat.

When we issue a biological opinion concluding that a project is likely to jeopardize the continued existence of a listed species and/or destroy or adversely modify critical habitat, we provide reasonable and prudent alternatives to the project, if any are identifiable, that would avoid the likelihood of jeopardy and/or destruction or adverse modification of critical habitat. We define "reasonable and prudent alternatives" (at 50 CFR 402.02) as alternative actions identified during consultation that:

- (1) Can be implemented in a manner consistent with the intended purpose of the action.
- (2) Can be implemented consistent with the scope of the Federal agency's legal authority and jurisdiction,
  - (3) Are economically and technologically feasible, and
- (4) Would, in the Director's opinion, avoid the likelihood of jeopardizing the continued existence of the listed species and/or avoid the likelihood of destroying or adversely modifying critical habitat.

Reasonable and prudent alternatives can vary from slight project modifications to extensive redesign or relocation of the project. Costs associated with implementing a

reasonable and prudent alternative are similarly variable.

Regulations at 50 CFR 402.16 require Federal agencies to reinitiate consultation on previously reviewed actions in instances where we have listed a new species or subsequently designated critical habitat that may be affected and the Federal agency has retained discretionary involvement or control over the action (or the agency's discretionary involvement or control is authorized by law). Consequently, Federal agencies sometimes may need to request reinitiation of consultation with us on actions for which consultation has been completed, if those actions with discretionary involvement or control may affect subsequently listed species or designated critical habitat.

Application of the "Adverse Modification" Standard

The key factor related to the adverse modification determination is whether, with implementation of the proposed Federal action, the affected critical habitat would continue to serve its intended conservation role for the species. Activities that may destroy or adversely modify critical habitat are those that alter the physical or biological features to an extent that appreciably reduces the conservation value of critical habitat for Graham's beardtongue and White River beardtongue. As discussed above, the role of critical habitat is to support life-history needs of the species and provide for the conservation of these species.

Section 4(b)(8) of the Act requires us to briefly evaluate and describe, in any proposed or final regulation that designates critical habitat, activities involving a Federal action that may destroy or adversely modify such habitat, or that may be affected by such designation.

Activities that may affect critical habitat, when carried out, funded, or authorized by a Federal agency, should result in consultation for Graham's beardtongue or White River beardtongue. These activities include, but are not limited to:

- (1) Actions that have the potential to appreciably degrade or destroy Graham's beardtongue or White River beardtongue habitat and primary constituent elements. Such activities could include, but are not limited to, energy development, road construction and maintenance, OHV use, and intensive livestock grazing. These activities could eliminate or reduce the habitat necessary for the growth, reproduction, and establishment of these species;
- (2) Alteration of naturally existing hydrology by redirection of sheet flow or water "perching" (to which the species may be adapted, discussed above in *Soils and Geology* for Graham's beardtongue) from areas adjacent to occupied habitat;
- (3) Compaction of soil through the establishment of new wellpads, roads, pipelines, or trails;
- (4) Activities that foster the introduction of nonnative vegetation, particularly noxious weeds, or create conditions that encourage the growth of nonnatives. These activities could include, but are not limited to: supplemental feeding of livestock, ground

disturbance associated with energy development, roads, and other soil-disturbing activities; and

(5) Indirect effects that appreciably decrease habitat value or quality (e.g., energy development near critical habitat that leads to disturbance, erosion, herbicide and pesticide use that could impair pollinators, and changes to drainage patterns, soil stability, and vegetative community composition).

### **Exemptions**

Application of Section 4(a)(3) of the Act

The Sikes Act Improvement Act of 1997 (Sikes Act) (16 U.S.C. 670a) required each military installation that includes land and water suitable for the conservation and management of natural resources to complete an integrated natural resources management plan (INRMP) by November 17, 2001. The INRMPs must to the extent appropriate and applicable, provide for fish and wildlife management; fish and wildlife habitat enhancement or modification; wetland protection, enhancement, and restoration where necessary to support fish and wildlife; and enforcement of applicable natural resource laws. There are no Department of Defense lands within our proposed critical habitat designation.

### **Exclusions**

Section 4(b)(2) of the Act states that the Secretary shall designate and make revisions to critical habitat on the basis of the best available scientific data after taking into consideration the economic impact, national security impact, and any other relevant impact of specifying any particular area as critical habitat. The Secretary may exclude an area from critical habitat if she determines that the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat, unless she determines, based on the best scientific data available, that the failure to designate such area as critical habitat will result in the extinction of the species. In making that determination, the statute on its face, as well as the legislative history, are clear that the Secretary has broad discretion regarding which factor(s) to use and how much weight to give to any factor.

Under section 4(b)(2) of the Act, we may exclude an area from designated critical habitat based on economic impacts, impacts on national security, or any other relevant impacts. In considering whether to exclude a particular area from the designation, we identify the benefits of including the area in the designation, identify the benefits of excluding the area from the designation, and evaluate whether the benefits of exclusion outweigh the benefits of inclusion. If the analysis indicates that the benefits of exclusion outweigh the benefits of inclusion, the Secretary may exercise her discretion to exclude the area only if such exclusion would not result in the extinction of the species.

**Exclusions Based on Economic Impacts** 

Under section 4(b)(2) of the Act, we consider the economic impacts of specifying any particular area as critical habitat. In order to consider economic impacts, we are preparing an analysis of the economic impacts of the proposed critical habitat designation and related factors. All of the proposed critical habitat units contain private lands, Federal lands with oil and gas leases, and grazing permits. Several State-owned parcels are included in some units where oil and gas development occurs. The economic analysis will estimate the economic impact of a potential designation of critical habitat on these activities.

During the development of a final designation, we will consider economic impacts based on information in our economic analysis, public comments, and other new information, and areas may be excluded from the final critical habitat designation under section 4(b)(2) of the Act and our implementing regulations at 50 CFR 424.19.

**Exclusions Based on National Security Impacts** 

Under section 4(b)(2) of the Act, we consider whether there are where a national security impact might exist. In preparing this proposal, we have determined that the lands within the proposed designation of critical habitat for Graham's beardtongue and White River beardtongue are not owned or managed by the Department of Defense or Department of Homeland Security, and, therefore, we anticipate no impact on national

security. Consequently, the Secretary is not intending to exercise her discretion to exclude any areas from the final designation based on impacts on national security.

**Exclusions Based on Other Relevant Impacts** 

Under section 4(b)(2) of the Act, we consider any other relevant impacts, in addition to economic impacts and impacts on national security. We consider a number of factors, including whether the landowners have developed any habitat conservation plans (HCPs) or other management plans for the area, or whether there are conservation partnerships that would be encouraged by designation of, or exclusion from, critical habitat. In addition, we look at any tribal issues, and consider the government-to-government relationship of the United States with tribal entities. We also consider any social impacts that might occur because of the designation. There are no tribal lands included in our proposed critical habitat designation.

In preparing this proposal, we have determined that there are no HCPs or other management plans for Graham's beardtongue and White River beardtongue, and the proposed designation does not include any tribal lands or trust resources. We anticipate no impact on tribal lands, partnerships, or HCPs from this proposed critical habitat designation. Accordingly, the Secretary does not intend to exercise her discretion to exclude any areas from the final designation based on other relevant impacts.

#### **Peer Review**

In accordance with our joint policy on peer review published in the **Federal Register** on July 1, 1994 (59 FR 34270), we will seek the expert opinions of at least three appropriate and independent specialists regarding this proposed rule. The purpose of peer review is to ensure that our critical habitat designation is based on scientifically sound data, and analyses. We have invited these peer reviewers to comment during this public comment period.

We will consider all comments and information received during this comment period on this proposed rule during our preparation of a final determination.

Accordingly, the final decision may differ from this proposal.

### **Public Hearings**

Section 4(b)(5) of the Act provides for one or more public hearings on this proposal, if requested. Requests must be received within 45 days after the date of publication of this proposed rule in the **Federal Register**. Such requests must be sent to the address shown in the **FOR FURTHER INFORMATION CONTACT** section. We will schedule public hearings on this proposal, if any are requested, and announce the dates, times, and places of those hearings, as well as how to obtain reasonable accommodations, in the **Federal Register** and local newspapers at least 15 days before the hearing.

## **Required Determinations**

Regulatory Planning and Review (Executive Orders 12866 and 13563)

Executive Order 12866 provides that the Office of Information and Regulatory
Affairs (OIRA) will review all significant rules. The Office of Information and
Regulatory Affairs has determined that this rule is not significant.

Executive Order 13563 reaffirms the principles of E.O. 12866 while calling for improvements in the nation's regulatory system to promote predictability, to reduce uncertainty, and to use the best, most innovative, and least burdensome tools for achieving regulatory ends. The executive order directs agencies to consider regulatory approaches that reduce burdens and maintain flexibility and freedom of choice for the public where these approaches are relevant, feasible, and consistent with regulatory objectives. E.O. 13563 emphasizes further that regulations must be based on the best available science and that the rulemaking process must allow for public participation and an open exchange of ideas. We have developed this rule in a manner consistent with these requirements.

Regulatory Flexibility Act (5 U.S.C. 601 et seq.)

Under the Regulatory Flexibility Act (RFA; 5 U.S.C. 601 *et seq.*) as amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA; 5 U.S.C

801 et seq.), whenever an agency is required to publish a notice of rulemaking for any proposed or final rule, it must prepare and make available for public comment a regulatory flexibility analysis that describes the effects of the rule on small entities (small businesses, small organizations, and small government jurisdictions). However, no regulatory flexibility analysis is required if the head of the agency certifies the rule will not have a significant economic impact on a substantial number of small entities. The SBREFA amended the RFA to require Federal agencies to provide a certification statement of the factual basis for certifying that the rule will not have a significant economic impact on a substantial number of small entities.

According to the Small Business Administration, small entities include small organizations such as independent nonprofit organizations; small governmental jurisdictions, including school boards and city and town governments that serve fewer than 50,000 residents; and small businesses (13 CFR 121.201). Small businesses include such businesses as manufacturing and mining concerns with fewer than 500 employees, wholesale trade entities with fewer than 100 employees, retail and service businesses with less than \$5 million in annual sales, general and heavy construction businesses with less than \$27.5 million in annual business, special trade contractors doing less than \$11.5 million in annual business, and forestry and logging operations with fewer than 500 employees and annual business less than \$7 million. To determine whether small entities may be affected, we will consider the types of activities that might trigger regulatory impacts under this designation as well as types of project modifications that may result. In general, the term "significant economic impact" is meant to apply to a typical small

business firm's business operations.

Importantly, the incremental impacts of a rule must be *both* significant and substantial to prevent certification of the rule under the RFA and to require the preparation of an initial regulatory flexibility analysis. If a substantial number of small entities are affected by the proposed critical habitat designation, but the per-entity economic impact is not significant, the Service may certify. Likewise, if the per-entity economic impact is likely to be significant, but the number of affected entities is not substantial, the Service may also certify.

Under the RFA, as amended, and following recent court decisions, Federal agencies are only required to evaluate the potential incremental impacts of rulemaking on those entities directly regulated by the rulemaking itself, and not the potential impacts to indirectly affected entities. The regulatory mechanism through which critical habitat protections are realized is section 7 of the Act, which requires Federal agencies, in consultation with the Service, to ensure that any action authorized, funded, or carried by the Agency is not likely to adversely modify critical habitat. Therefore, only Federal action agencies are directly subject to the specific regulatory requirement (avoiding destruction and adverse modification) imposed by critical habitat designation. Under these circumstances, it is our position that only Federal action agencies will be directly regulated by this designation. Therefore, because Federal agencies are not small entities, the Service may certify that the proposed critical habitat rule will not have a significant economic impact on a substantial number of small entities.

We acknowledge, however, that in some cases, third-party proponents of the action subject to permitting or funding may participate in a section 7 consultation, and thus may be indirectly affected. We believe it is good policy to assess these impacts if we have sufficient data before us to complete the necessary analysis, whether or not this analysis is strictly required by the RFA. While this regulation does not directly regulate these entities, in our draft economic analysis we will conduct a brief evaluation of the potential number of third parties participating in consultations on an annual basis in order to ensure a more complete examination of the incremental effects of this proposed rule in the context of the RFA.

In conclusion, we believe that, based on our interpretation of directly regulated entities under the RFA and relevant case law, this designation of critical habitat will only directly regulate Federal agencies which are not by definition small business entities. As such, we certify that, if promulgated, this designation of critical habitat would not have a significant economic impact on a substantial number of small business entities.

Therefore, an initial regulatory flexibility analysis is not required. However, though not necessarily required by the RFA, in our draft economic analysis for this proposal, we will consider and evaluate the potential effects to third parties that may be involved with consultations with Federal action agencies related to this action.

Energy Supply, Distribution, or Use—Executive Order 13211

Executive Order 13211 (Actions Concerning Regulations That Significantly

Affect Energy Supply, Distribution, or Use) requires agencies to prepare Statements of Energy Effects when undertaking certain actions. Graham's beardtongue and White River beardtongue both occur in areas with energy development activity. Existing well pads and proposed oil shale development projects are within proposed critical habitat units. On Federal lands, entities conducting energy-related activities would need to consult within areas designated as critical habitat. We are deferring our finding until the draft economic analysis has been completed. We will further evaluate this issue as we conduct our economic analysis, and review and revise this assessment as warranted.

*Unfunded Mandates Reform Act (2 U.S.C. 1501* et seq.)

In accordance with the Unfunded Mandates Reform Act (2 U.S.C. 1501 *et seq.*), we make the following findings:

(1) This rule would not produce a Federal mandate. In general, a Federal mandate is a provision in legislation, statute, or regulation that would impose an enforceable duty upon State, local, or tribal governments, or the private sector, and includes both "Federal intergovernmental mandates" and "Federal private sector mandates." These terms are defined in 2 U.S.C. 658(5)-(7). "Federal intergovernmental mandate" includes a regulation that "would impose an enforceable duty upon State, local, or tribal governments" with two exceptions. It excludes "a condition of Federal assistance." It also excludes "a duty arising from participation in a voluntary Federal program," unless the regulation "relates to a then-existing Federal program under which

\$500,000,000 or more is provided annually to State, local, and tribal governments under entitlement authority," if the provision would "increase the stringency of conditions of assistance" or "place caps upon, or otherwise decrease, the Federal Government's responsibility to provide funding," and the State, local, or tribal governments "lack authority" to adjust accordingly. At the time of enactment, these entitlement programs were: Medicaid; Aid to Families with Dependent Children work programs; Child Nutrition; Food Stamps; Social Services Block Grants; Vocational Rehabilitation State Grants; Foster Care, Adoption Assistance, and Independent Living; Family Support Welfare Services; and Child Support Enforcement. "Federal private sector mandate" includes a regulation that "would impose an enforceable duty upon the private sector, except (i) a condition of Federal assistance or (ii) a duty arising from participation in a voluntary Federal program."

The designation of critical habitat does not impose a legally binding duty on non-Federal Government entities or private parties. Under the Act, the only regulatory effect is that Federal agencies must ensure that their actions do not destroy or adversely modify critical habitat under section 7. While non-Federal entities that receive Federal funding, assistance, or permits, or that otherwise require approval or authorization from a Federal agency for an action, may be indirectly impacted by the designation of critical habitat, the legally binding duty to avoid destruction or adverse modification of critical habitat rests squarely on the Federal agency. Furthermore, to the extent that non-Federal entities are indirectly impacted because they receive Federal assistance or participate in a voluntary Federal aid program, the Unfunded Mandates Reform Act would not apply, nor would

critical habitat shift the costs of the large entitlement programs listed above onto State governments.

(2) We do not believe that this rule would significantly or uniquely affect small governments. Small governments will be affected only to the extent that any programs having Federal funds, permits, or other authorized activities must ensure that their actions will not adversely affect the critical habitat. Therefore, a Small Government Agency Plan is not required. However, we will further evaluate this issue as we conduct our economic analysis, and review and revise this assessment if appropriate.

Takings—Executive Order 12630

In accordance with Executive Order 12630 ("Government Actions and Interference with Constitutionally Protected Private Property Rights"), we have analyzed the potential takings implications of designating critical habitat for the Graham's beardtongue and White River beardtongue in a takings implications assessment. Based on the best available information, the takings implications assessment concludes that this designation of critical habitat for the Graham's beardtongue and the White River beardtongue does not pose significant takings implications. However, we will further evaluate this issue as we develop our final designation, and review and revise this assessment as warranted.

Federalism—Executive Order 13132

In accordance with Executive Order 13132 (Federalism), this proposed rule does not have significant Federalism effects. A federalism summary impact statement is not required. In keeping with Department of the Interior and Department of Commerce policy, we requested information from, and coordinated development of, this proposed critical habitat designation with appropriate State resource agencies in Utah and Colorado. The designation of critical habitat in areas occupied by Graham's beardtongue and White River beardtongue may impose nominal additional regulatory restrictions to those currently in place and, therefore, has little incremental impact on State and local governments and their activities. The designation may have some benefit to these governments because the areas that contain the physical and biological features essential to the conservation of the species are more clearly defined, and the elements of the features of the habitat necessary to the conservation of the species are specifically identified. This information does not alter where and what federally sponsored activities may occur. However, it may assist local governments in along-range planning (rather than having them wait for case-by-case section 7 consultation to occur).

Where State and local governments require approval or authorization from a Federal agency for actions that may affect critical habitat, consultation under section 7(a)(2) would be required. While non-Federal entities that receive Federal funding, assistance, or permits, or that otherwise require approval or authorization from a Federal agency for an action, may be indirectly impacted by the designation of critical habitat, the legally binding duty to avoid destruction or adverse modification of critical habitat rests

squarely on the Federal agency.

Civil Justice Reform—Executive Order 12988

In accordance with Executive Order 12988 (Civil Justice Reform), the Office of the Solicitor has determined that the rule does not unduly burden the judicial system and that it meets the requirements of sections 3(a) and 3(b)(2) of the Order. We have proposed designating critical habitat in accordance with the provisions of the Act. To assist the public in understanding the habitat needs of the species, the rule identifies the elements of physical or biological features essential to the conservation of the species. The designated areas of critical habitat are presented on maps, and the rule provides several options for the interested public to obtain more detailed location information, if desired.

Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.)

This rule does not contain any new collections of information that require approval by OMB under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*). This rule will not impose recordkeeping or reporting requirements on State or local governments, individuals, businesses, or organizations. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

National Environmental Policy Act (42 U.S.C. 4321 et seq.)

It is our position that, outside the jurisdiction of the U.S. Court of Appeals for the Tenth Circuit, we do not need to prepare environmental analyses pursuant to the National Environmental Policy Act (NEPA; 42 U.S.C. 4321 *et seq.*) in connection with designating critical habitat under the Act. We published a notice outlining our reasons for this determination in the **Federal Register** on October 25, 1983 (48 FR 49244). This position was upheld by the U.S. Court of Appeals for the Ninth Circuit (*Douglas County* v. *Babbitt*, 48 F.3d 1495 (9th Cir. 1995), cert. denied 516 U.S. 1042 (1996)).] However, when the range of the species includes States within the Tenth Circuit, such as that of Graham's beardtongue and White River beardtongue, under the Tenth Circuit ruling in *Catron County Board of Commissioners* v. *U.S. Fish and Wildlife Service*, 75 F.3d 1429 (10th Cir. 1996), we will undertake a NEPA analysis for critical habitat designation and notify the public of the availability of the draft environmental assessment for this proposal when it is finished.

Government-to-Government Relationship with Tribes

In accordance with the President's memorandum of April 29, 1994 (Government-to-Government Relations with Native American Tribal Governments; 59 FR 22951), Executive Order 13175 (Consultation and Coordination With Indian Tribal Governments), and the Department of the Interior's manual at 512 DM 2, we readily acknowledge our responsibility to communicate meaningfully with recognized Federal Tribes on a government-to-government basis. In accordance with Secretarial Order 3206

of June 5, 1997 (American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act), we readily acknowledge our responsibilities to work directly with tribes in developing programs for healthy ecosystems, to acknowledge that tribal lands are not subject to the same controls as Federal public lands, to remain sensitive to Indian culture, and to make information available to tribes.

We determined that there are no tribal lands that were occupied by Graham's beardtongue or White River beardtongue at the time of listing that contain the features essential for conservation of the species, and no tribal lands unoccupied by Graham's beardtongue or White River beardtongue that are essential for the conservation of these species. Therefore, we are not proposing to designate critical habitat for Graham's beardtongue or White River beardtongue on tribal lands.

### Clarity of the Rule

We are required by Executive Orders 12866 and 12988 and by the Presidential Memorandum of June 1, 1998, to write all rules in plain language. This means that each rule we publish must:

- (1) Be logically organized;
- (2) Use the active voice to address readers directly;
- (3) Use clear language rather than jargon;
- (4) Be divided into short sections and sentences; and
- (5) Use lists and tables wherever possible.

If you feel that we have not met these requirements, send us comments by one of the methods listed in the **ADDRESSES** section. To better help us revise the rule, your comments should be as specific as possible. For example, you should tell us the numbers of the sections or paragraphs that are unclearly written, which sections or sentences are too long, the sections where you feel lists or tables would be useful, etc.

# **References Cited**

A complete list of references cited in this rulemaking is available on the Internet at <a href="http://www.regulations.gov">http://www.regulations.gov</a> under Docket No. FWS-R6-ES-2013-0082 and upon request from the Utah Ecological Services Field Office (see **FOR FURTHER INFORMATION CONTACT**).

#### **Authors**

The primary authors of this package are the staff members of the Utah Ecological Services Field Office.

### List of Subjects in 50 CFR Part 17

Endangered and threatened species, Exports, Imports, Reporting and recordkeeping requirements, Transportation.

# **Proposed Regulation Promulgation**

Accordingly, we propose to amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, as set forth below:

# PART 17—ENDANGERED AND THREATENED WILDLIFE AND PLANTS

1. The authority citation for part 17 continues to read as follows:

**Authority:** 16 U.S.C. 1361–1407; 1531–1544; 4201–4245, unless otherwise noted.

2. In § 17.96, amend paragraph (a) by adding entries for "Penstemon grahamii (Graham's beardtongue)" and "Penstemon scariosus var. albifluvis (White River beardtongue)" in alphabetical order under Family Plantaginaceae, to read as follows:

### § 17.96 Critical habitat—plants.

\* \* \* \* \*

(a) Flowering plants.

\* \* \* \* \*

Family Plantaginaceae: *Penstemon grahamii* (Graham's beardtongue)

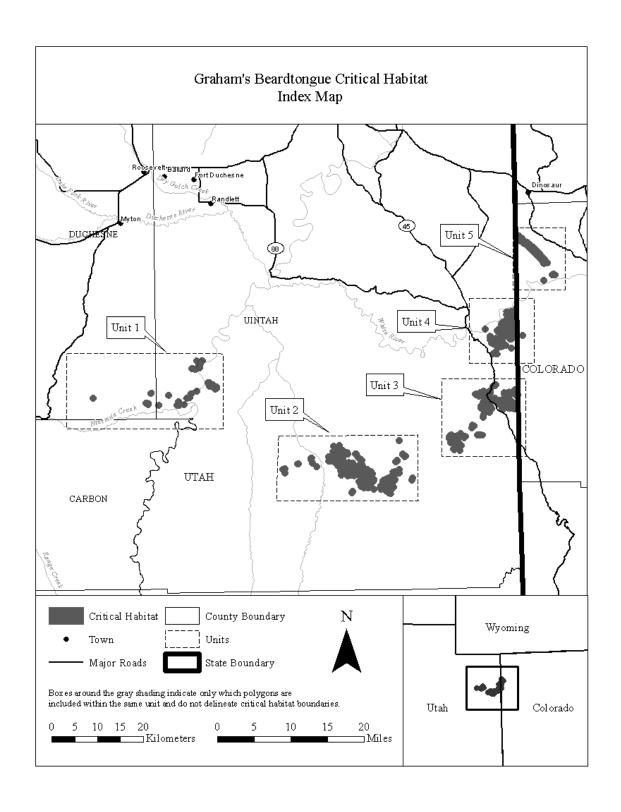
- (1) Critical habitat units are depicted for Uintah and Duchesne Counties, Utah, and Rio Blanco County, Colorado, on the maps below.
- (2) Within these areas, the primary constituent elements of the physical or biological features essential to the conservation of Graham's beardtongue consist of:
  - (i) Plant community.
  - (A) Barren areas with little, but diverse, plant cover.
- (B) Presence of dwarf shrubs and cushion-like, oil shale endemic plants, including Dragon milkvetch (*Astragalus lutosus*), oilshale columbine (*Aquilegia*

- barnebyi), Barneby's thistle (Cirsium barnebyi), oilshale cryptantha (Cryptantha barnebyi), Graham's cryptantha (Cryptantha grahamii), Rollins' cryptantha (Cryptantha rollinsii), ephedra buckwheat (Eriogonum ephedroides), and White River beardtongue (Pensemon scariosus var. albifluvis).
- (C) Intact, surrounding, native plant community to support pollinators and protect from the encroachment of invasive weeds and other potential threats.
  - (ii) Slopes and topography.
  - (A) Southwest- to western-facing slopes.
  - (B) Slopes of less than 40 degrees; average slope of 17.6 degrees.
  - (iii) Soils and geology.
  - (A) Parachute Creek Member and other upper members of the Green River Geologic Formation.
- (B) Appropriate soil morphology characterized by shallow soils with virtually no soil horizon development, with a surface usually covered by broken shale channers or light clay derived from the thinly bedded shale.
- (C) Intact soils with minimal anthropogenic disturbance (at or below current levels) within Graham's beardtongue occupied habitat and nearby plant communities.
- (iv) *Climate*. A cold desert climate with the same conditions under which the species evolved and is typical for the area. Annual precipitation of 15 to 30 cm (6 to 12 inches) with most precipitation in spring and fall and snow cover from December through March. Average winter low temperature of -14 °C (7 °F) and average summer high of 34 °C (93 (°F)) with at least 45 to 90 consecutive days less than 4 °C (40 °F).
  - (v) Habitat for pollinators.

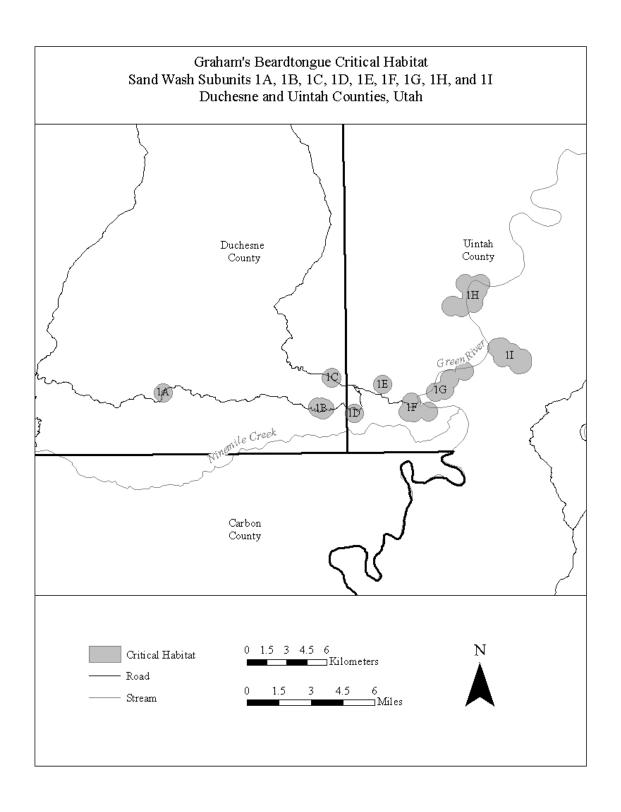
- (A) Ground and twig nesting areas for pollinators. A diverse mosaic of native plant communities that include flowering plants that provide nectar and pollen for a wide array of pollinator species.
- (B) Connectivity between areas allowing pollinators to move from one site to the next within each population.
- (C) A 700-m (2,297-ft) area beyond occupied habitat to conserve the pollinators essential for plant reproduction.
- (3) Critical habitat does not include manmade structures (such as buildings, aqueducts, runways, roads, and other paved areas) and the land on which they are located existing within the legal boundaries on the effective date of this entry.
- (4) Critical habitat map units. Data layers defining map units were created by using satellite imagery (Bing 2012 Aerial Imagery basemap provided with ArcMap10, NAIP 2011 imagery). Units were mapped using NAD 83 Universal Transverse Mercatore (UTM), Zone 12 N coordinates. Location information came from a wide array of sources. A habitat model created by the Colorado Natural Heritage Program was also used. The maps in this entry, as modified by any accompanying regulatory text, establish the boundaries of the critical habitat designation. On the index map, critical habitat is delineated by gray shading. Boxes around the gray shading indicate only which polygons are included within the same unit and do not delineate critical habitat boundaries. The coordinates or plot points or both on which each map is based are available to the public at the Service's internet site (http://www.fws.gov/utahfieldoffice/), on

http://www.regulations.gov at Docket No. FWS-R6-ES-2013-0082, and at the field office responsible for this designation. You may obtain field office location information by contacting one of the Service regional offices, the addresses of which are listed at 50 CFR 2.2.

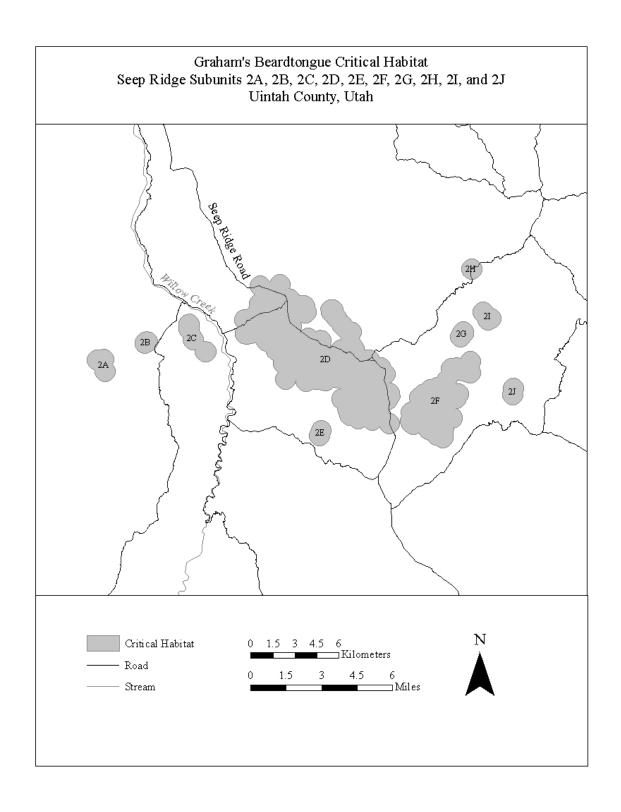
(5) Index map follows:



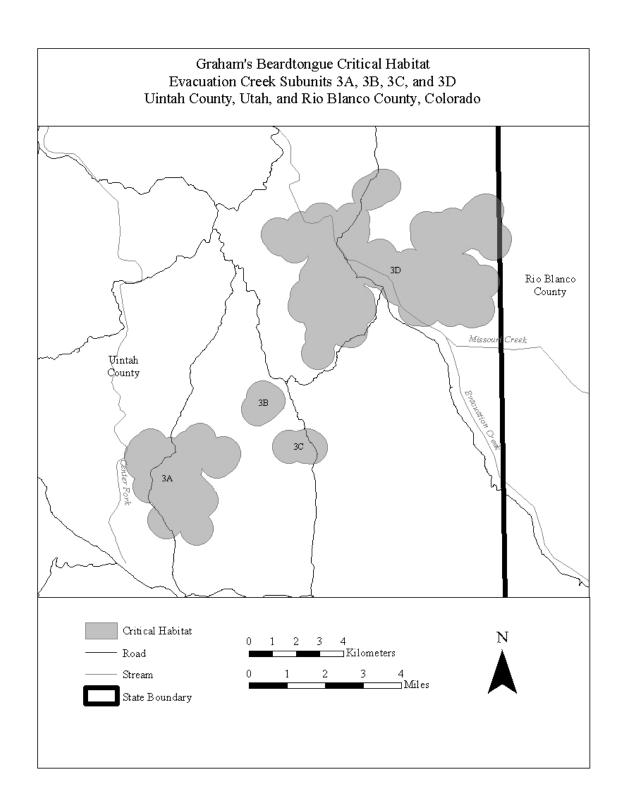
(6) Unit 1: Sand Wash, Duchesne and Uintah Counties, Utah. Map of Subunits1A, 1B, 1C, 1D, 1E, 1F, 1G, 1H, and 1I follows:



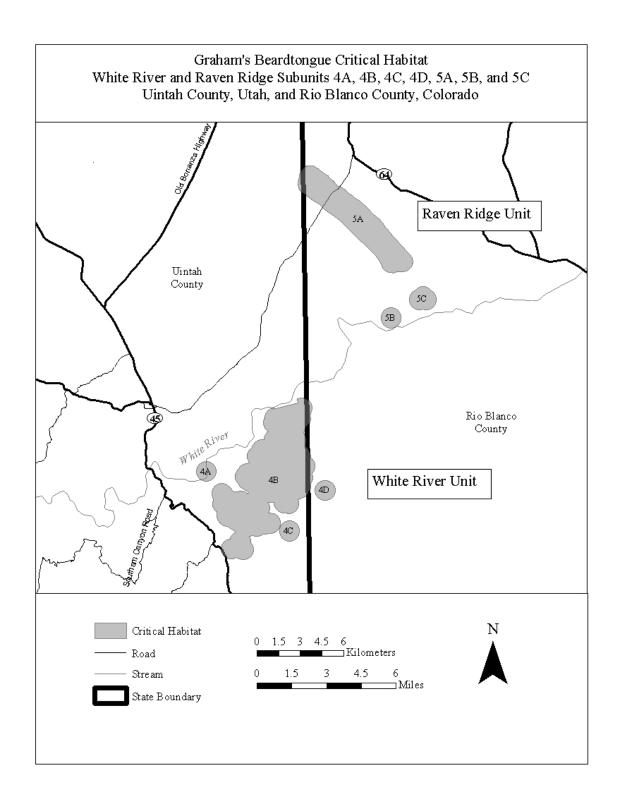
(7) Unit 2: Seep Ridge, Uintah County, Utah. Map of Subunits 2A, 2B, 2C, 2D, 2E, 2F, 2G, 2H, 2I, and 2J follows:



(8) Unit 3: Evacuation Creek, Uintah County, Utah, and Rio Blanco County, Colorado. Map of Subunits 3A, 3B, 3C, and 3D follows:



(9) Unit 4: White River, Uintah County, Utah. Map of Subunits 4A, 4B, 4C, 4D, 5A, 5B, and 5C follows:



(10) Unit 5: Raven Ridge, Rio Blanco County, Colorado. Map of Unit 5 is provided at paragraph (a)(9) of this entry.

Family Plantaginaceae: Penstemon scariosus var. albifluvis (White River beardtongue)

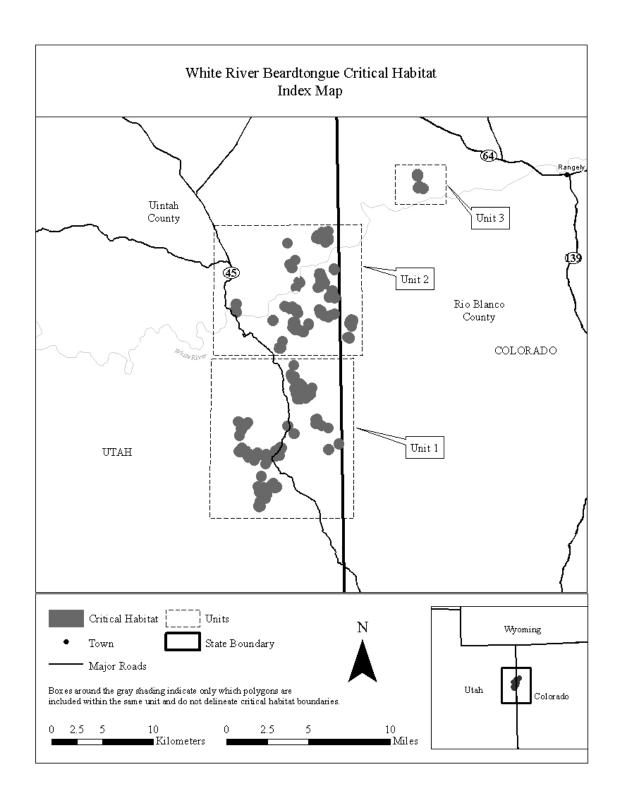
- (1) Critical habitat units are depicted for Uintah County, Utah, and Rio Blanco County, Colorado, on the maps below.
- (2) Within these areas, the primary constituent elements of the physical or biological features essential to the conservation of White River beardtongue consist of:
  - (i) Plant community.
  - (A) Barren areas with little, but diverse, plant cover.
- (B) Presence of dwarf shrubs and cushion-like, oil shale endemic plants, including Dragon milkvetch (*Astragalus lutosus*), oilshale columbine (*Aquilegia barnebyi*), Barneby's thistle (*Cirsium barnebyi*), oilshale cryptantha (*Cryptantha barnebyi*), Graham's cryptantha (*Cryptantha grahamii*), Rollins' cryptantha (*Cryptantha rollinsii*), ephedra buckwheat (*Eriogonum ephedroides*), and occasionally Graham's beardtongue (*Penstemon grahamii*).
- (C) Intact, surrounding, native plant community to support pollinators and protect from the encroachment of invasive weeds and other potential threats.
  - (ii) *Slopes and topography*.
  - (A) South- to southwest-facing slopes.
  - (B) Slopes of less than 33 degrees; average slope of 19.2 degrees.

- (iii) Soils and geology.
- (A) Parachute Creek Member and other upper members of the Green River Geologic Formation.
- (B) Appropriate soil morphology characterized by shallow soils with virtually no soil horizon development, with a surface usually covered by broken shale channers or light clay derived from the thinly bedded shale.
- (C) Intact soils with minimal anthropogenic disturbance (at or below current levels) within White River beardtongue occupied habitat and nearby plant communities.
- (iv) *Climate*. A cold desert climate with the same conditions under which the species evolved and is typical for the area. Annual precipitation of 15 to 30 cm (6 to 12 inches) with most precipitation in spring and fall and snow cover from December through March. Average winter low temperature of -14 °C (7 °F) and average summer high of 34 °C (93 (°F)) with at least 45 to 90 consecutive days less than 4 °C (40 °F).
  - (v) Habitat for pollinators.
  - (A) Ground and twig nesting areas for pollinators. A diverse mosaic of native plant communities that include flowering plants that provide nectar and pollen for a wide array of pollinator species.
- (B) Connectivity between areas allowing pollinators to move from one site to the next within each population.
- (C) A 500-m (1,640-ft) area beyond occupied habitat to conserve the pollinators essential for plant reproduction.
  - (3) Critical habitat does not include manmade structures (such as buildings,

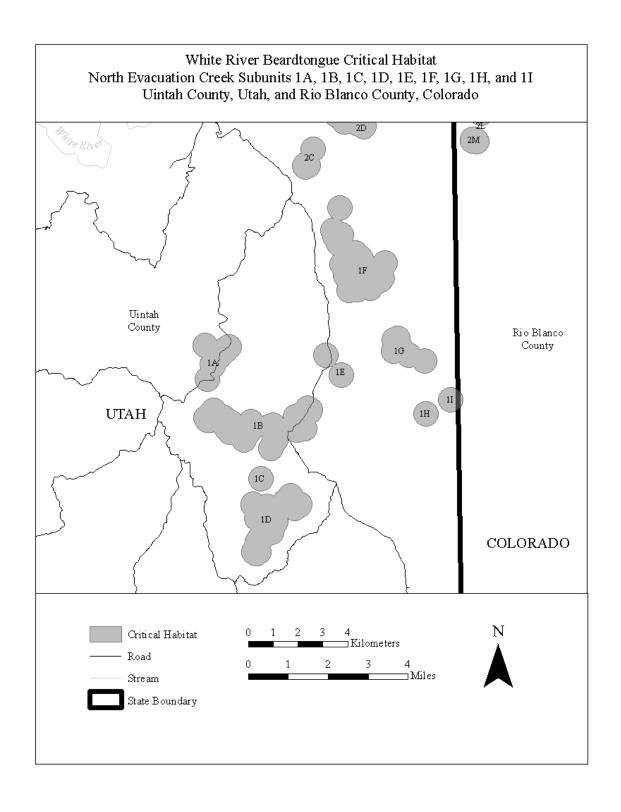
aqueducts, runways, roads, and other paved areas) and the land on which they are located existing within the legal boundaries on the effective date of this entry.

(4) Critical habitat map units. Data layers defining map units were created by using satellite imagery (Bing 2012 Aerial Imagery basemap provided with ArcMap10, NAIP 2011 imagery). Units were mapped using NAD 83 Universal Transverse Mercatore (UTM), Zone 12 N coordinates. Location information came from a wide array of sources. The maps in this entry, as modified by any accompanying regulatory text, establish the boundaries of the critical habitat designation. On the index map, critical habitat is delineated by gray shading. Boxes around the gray shading indicate only which polygons are included within the same unit and do not delineate critical habitat boundaries. The coordinates or plot points or both on which each map is based are available to the public at the Service's internet site (http://www.fws.gov/utahfieldoffice/), on http://www.regulations.gov at Docket No. FWS-R6-ES-2013-0082, and at the field office responsible for this designation. You may obtain field office location information by contacting one of the Service regional offices, the addresses of which are listed at 50 CFR 2.2.

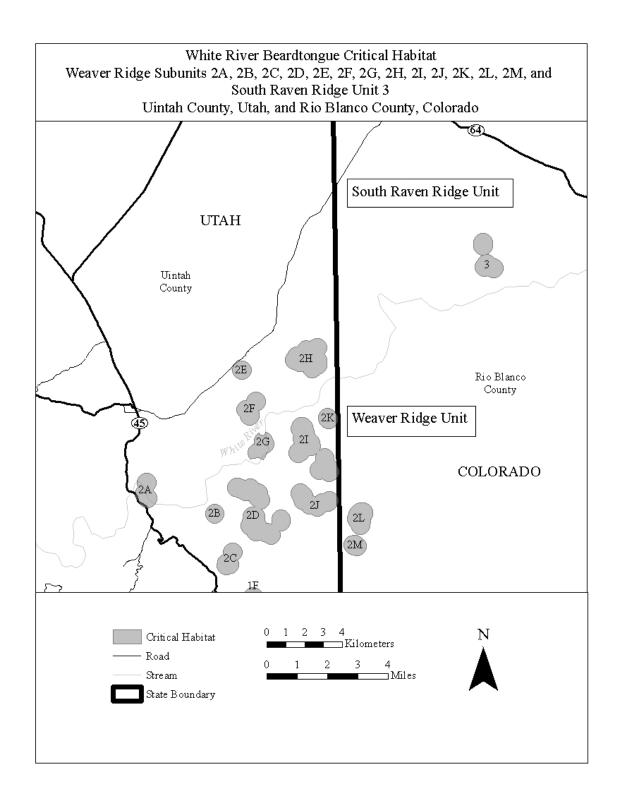
### (5) Index map follows:



(6) Unit 1: North Evacuation Creek, Uintah County, Utah, and Rio Blanco County, Colorado. Map of Subunits 1A, 1B, 1C, 1D, 1E, 1F, 1G, 1H, and 1I follows:



(7) Unit 2: Weaver Ridge, Uintah County, Utah, and Rio Blanco County, Colorado. Map of Subunits 2A, 2B, 2C, 2D, 2E, 2F, 2G, 2H, 2I, 2J, 2K, 2L, 2M and Unit 3 follows:



(8) Unit 3: South Raven Ridge, Rio Blanco County, Colorado. Map of Unit 3 is provided at paragraph (a)(7) of this entry.
* * * *
Dated: July 18, 2013
Rachel Jacobson
Principal Deputy Assistant Secretary for Fish and Wildlife and Parks
Billing Code 4310-55-P
[FR Doc. 2013-18335 Filed 08/05/2013 at 8:45 am; Publication Date: 08/06/2013]